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SAN FRANCISCO THEOLOGICAL SEMINARY
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HOME EDUCATION

BY THE

AUTHOR OF NATURAL HISTORY OF ENTHUSIASM

FOURTH EDITION

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PREFACE.

In determining to give my own children the kind of education which I myself received, namely, a domestic one, I soon found the want, not merely of elementary books on particular subjects, such as I could employ with entire satisfaction, but also of any comprehensive system, specifically applicable to the peculiar circumstances of a home course of instruction.

In a word, and with all the respect that is due to the many able and amiable writers who have favoured the world with their thoughts on the general subject of education, I have felt myself compelled, as well to digest the principles of procedure in such a course, as to devise the methods proper for giving them effect.

It is manifest that a scheme of family instruction ought not merely to comprise what may in

some degree compensate for the unquestionable advantages that attach to schools; but also to include the means for improving, to the utmost, those peculiar and inestimable opportunities of moral and mental advancement which are to be found at home—and there only. Not to do this, would be to place ourselves in a position in which private education could not at all sustain comparison with the more usual method.

Now, not to mention some incidental and yet important recommendations of the plan which we have at present in view, the chief and the most decisive one (moral considerations apart) is the facilities afforded, at home, for bestowing a well-considered culture upon each of the several faculties of the mind; and for doing this in the order of their natural development.

This point may then be named as the leading characteristic of the system which it is the intention of the present volume to explain.

But a scheme of intellectual culture, conformed to the principle of a careful adherence to the order of nature, in expanding the several faculties, is not to be comprised within very narrow limits. Indeed it is evident that an elaborate operation, extended through ten or twelve years (the five or

six years of infancy not included) if it be so far described in its details as to be made available to others, must occupy a good deal of room. In the present volume, after advancing some observations applicable to the home economy in general, I have gone no further than to open the subject of a systematic culture of the mind, by suggesting some methods for eliciting, and for enriching, those faculties that are passive, and recipient chiefly, and which, as they are developed early, demand the teacher's attention before the time when any strenuous labours ought to be exacted from children.

I wish to secure the attention of some who may be my readers, to a point, adverted to more than once in the course of the volume, namely, that although the phrase—Home Education, understood in its primary import, means, of course—the education of a family under the paternal roof; yet, the principles and the methods of instruction propounded in this work are, I hope, such as, with more or less modification, may be applied in all cases where the number assembled around a teacher does not much exceed the limits of a large family.

In advancing, as I am now doing, the principles and methods of Intellectual Culture,

it would give me much uneasiness to find myself so far misunderstood as for it to be inferred that I assign Moral and Religious culture to a subordinate place. The reader would do me the greatest wrong in attributing to me any such intention. My most serious convictions, and I hope too my own practice as the father of a family, are decisively opposed to so fatal an error.

Having made this profession, which I do with some earnestness of feeling, it will not perhaps be required of me to state my reasons for avoiding, at present, those subjects to which, in fact, I attach supreme importance.

STANFORD RIVERS,
1837.

PREFACE TO THE FOURTH EDITION.

In the four years that have elapsed since the publication of the first edition of this volume, engagements, more arduous and less pleasing than those I had then in prospect, have forbidden my attempting to complete the scheme of domestic culture which I had projected, and indeed have obliged me to relinquish, in great measure, that personal superintendence of my children's course of instruction whence I should have derived a better qualification for writing usefully on the subject.

I still, however, entertain the hope of returning to my purpose; and, should this intention be realized, I shall, with unabated zest, again enter upon themes equally agreeable and important.

To complete the scheme of domestic INTELLECTUAL CULTURE—of which this volume exhibits only the commencements, and to express my views on the momentous subject of Moral and Religious Education at Home, is yet my earnest purpose.

I. T.

STANFORD RIVERS,
December, 1841.

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HOME EDUCATION.

CHAPTER I.

POINTS OF COMPARISON BETWEEN PUBLIC AND PRIVATE EDUCATION.

I AM not about to compare public and private education as if intending to disparage the one, that the other, which is my chosen subject, may appear to the greater advantage. No question can reasonably be entertained as to the great benefits that attach to school discipline, whether effected on a larger or a smaller scale; nor is it to be supposed, whatever may be said of female education, that that of boys could, in the majority of instances, be well conducted beneath the paternal roof.

The reader would have good reason to distrust the judgment of a writer who, for the purpose of enhancing the importance of the particular task he has undertaken, should speak of Home

Education as if it were abstractedly and universally preferable to the opposite system; or should affirm that it might be adopted by the generality of families: the contrary of both suppositions I fully admit.

Having thus precluded a probable misunderstanding of my intention, I may with equal explicitness, profess my belief, first, that Home Education, if the principles and methods proper to it are well understood, is both practicable and preferable in more instances than has often been supposed, and especially so for girls; and secondly, that this system is susceptible of improvements, such as could not fail, if adopted to any considerable extent, very sensibly to promote the moral and intellectual advancement of the community.

It is especially with this persuasion that I come forward to recommend, warmly, but not blindly, that system of culture which may be carried on in a private family. With the methods of home education I have been at different times, and am now again, practically conversant; its theory too has engaged much of my attention; and deeply impressed as I am with a conviction of the advantages that are peculiar to it, I shall think myself happy if, without attempting to alter the determination of parents who are actually sending their children to school, I may afford some aid to those who are wishing to retain them at home.

I ought to premise that the phrase, HOME EDUCATION, is not, in my view, to be strictly confined to the training of the children of a single family, under the paternal roof: but may embrace any instances in which the number assembled for instruction is not greater than may well consist with the enjoyments, the intimacy, the usages, and the harmony that ought to attach to a family.

Understanding the term in this extended sense, I entertain the hope that, while professing to write for parents, I may render some aid to teachers also, having the charge of a limited number; for it is only reasonable to suppose that, as well the general principles of intellectual culture, as the specific methods of instruction which are applicable to the eight or ten children of a family, may be brought to bear, with perhaps a little modification, upon the twelve, or fifteen, or even twenty, who may be gathered from several families.

A HOME, whether its inmates be related by the ties of consanguinity or not, is a place where the stress of government rests much rather upon affection, and sentiment, than upon rules and penalties, or the routine and mechanism of order. School, on the contrary, is a little world where, as in the great world, if delicate sentiments exist at all, they must be kept out of view; or at least must neither be allowed to interfere

with the movements of the general body; nor must be mainly relied upon. On this point of distinction much will be found to hinge; - one might say, every thing, more or less immediately, within the two systems respectively; and especially so in relation to whatever affects moral training.

But to confine myself to my proper subject, it may be said that the culture of the intellectual faculties, in combination with a warm and refined family affection, tends to impart a healthy freshness to the mere reason, and to bring it into happy alliance with the moral sentiments, in a manner that can hardly be effected at school, and yet so as is highly conducive to the harmony of the faculties, and to the general efficiency of the character.

It is probable indeed that some conductors of large schools may resent the supposition that the ennobling emotions of the heart are lost sight of in the communities over which they preside; and they may deny that feeling necessarily gives way to law, and to the force of mechanism, where numbers are to be governed. But while it is freely granted that, under skilful management, and even in the largest schools, certain generous sentiments and motives of honour may almost supersede the operation of law and of its sanctions, yet it can never be pretended that emotions of this class are the same in themselves, or the same in their influence on the character,

as the tender, profound, and personal affections which cement a happy family. The sacred feeling which is the bond of the home circle will by no means bear to be stretched much beyond the limits for which nature has woven it. The master of a school, if wise, firm, and kind, will no doubt draw to himself the respectful and grateful regards of his pupils; or of the better portion of them; and so a good feeling may pervade the mass; but who can believe that boys at school ever love their master as sons love a father; or that they can feel one towards another as brothers? Nature is not to be imitated on so large a scale in her finer productions.

Parents can hardly need to be reminded that if, in retaining their children at home, they have recourse to a stern and formal mechanism, or rigidly enforce a lifeless system of rules, to the exclusion of affection, the prime idea of HOME is lost, and the disadvantages of a public education are taken up, without its counter-balancing benefits. The children of any such family would certainly be happier, as well as better taught, at school, than at home.

Again; a principal and necessary distinction between the two systems, now compared, is this, that while, in the one, all methods of instruction and modes of training are, or may be, with more or less exactness, adapted to the faculties, tastes, and probable destination of the pupils singly, and may be accommodated to the individual

ability of each; in the other system, that is to say at school, it is the mass of minds only, or some few general classes, at the best, that can be thought of. It is true that a sedulous and conscientious teacher, or an ambitious one, from other motives, may take pains to adapt his usual methods of training to the taste and capacity of certain individuals, under his care, lending aid to the feeble, and bestowing especial care upon the intelligent; but it might well be questioned, in such cases, whether the eighteen out of twenty are not losers to the whole amount of the peculiar regard that is given to the one or two; or whether the damage sustained by some, be not just proportioned to the advantages secured for others. School training, to be equitable, must be a training of minds in the mass.

And yet it is granted that even this undistinguishing mechanism, which is proper to a school, and which carries all before it with a sort of blind force, is in itself, in some respects, a good; and that if some are the victims of it, to others it may be beneficial. There are children who are not to be advanced at all, except by the means of a mechanical momentum; and such might well be sent from home to school, on this sole account, that they will there be carried forward on the irresistible wheel-work of school order.

This allowed, it is yet unquestionable that great and indefinite advantages are derivable from an intimate adaptation of every means of

culture, as well in substance as in mode, to the powers, the tastes, and the talents of young minds singly considered. This fitting of the process of instruction to the faculties that are to be trained, will, when skilfully made use of, bring all minds to a much higher level, severally, than (a very few excepted) they would have reached if dealt with in the aggregate. In the following pages frequent occasions will arise for pointing out the particular means that may be resorted to with the view of carrying this sort of adaptation as far as it is desirable it should go.

But here it may be remarked, in furtherance of what has just before been said, that although, in a large school, even when broken up into classes, little regard can equitably be paid to individual peculiarities of faculty or taste; the principle now named, as characteristic of home education, may readily be extended to schools not much exceeding the bounds of a numerous family. In fact it is only the personal ability of the teacher, his tact, his intelligence, and his assiduity, that can fix the limits within which the principle of adaptation may be made to take effect. There are those who could bestow individual culture upon twelve, or fifteen, or twenty minds, more effectively than is done by others, charged only with two or three; and far more so in fact than is often attempted by a perfunctory tutor of a solitary pupil.

At home, not only are there few to be thought

of, but these few are brought under a well-digested system of treatment, extended through the entire period of education; and a teacher or parent who may have erred at first, in his estimate of a child's powers, has the opportunity to amend his judgment, and to modify his methods of treatment. But at school, even if a regard to what is due to all, did not prevent the teacher from thinking much of the capacities of individuals, the frequent changes that are taking place, and the short time, ordinarily, during which he has to do with any one of his pupils, must forbid, or greatly discourage his endeavours to suit himself, in any consistent manner, to the peculiar temperament of individuals. The teacher's good will towards his pupils must be, and it ought to be, of a very movable or transferable sort; and any feeling, or any effort of a more special kind, even if it did not imply positive injustice to some, would involve the prejudicial consequences of favouritism.

But home education, and especially when conducted by parents themselves, or under their immediate superintendence, may, in its successive parts, be specially adapted to the minds that are to receive it; and may have the advantage of the most intimate knowledge of the ability, and the tendency of each. Now it is obvious that the principle of adaptation, skilfully made use of, cannot but save much time and loss of labour; and that it may moreover prevent the

damage that is so often sustained by fine faculties, roughly treated along with others. For example, a teacher may see reason for remitting certain pursuits with which the mind of the individual has absolutely no affinity, while so much the more attention is given to other studies, which nature has not interdicted. Or, on the other hand, extraordinary natural endowments may be watched over, and held in check, and guided, so as shall give them the utmost ultimate advantage, and preclude the fruitless regrets of after years, under the recollection of squandered time, and mis-directed industry. Again; in diversifying the methods of teaching, in accordance with the capacities of those who are to be taught, much may be effected at home which could by no means be admitted at school; and thus in fact the entire period of education may be turned to the best account; while none are left to be the victims of fixed usages, and of courses of study proper perhaps for the majority, but deplorably unsuited to the few. In fact it is more than a few who leave school almost totally deficient in mental culture, not indeed because they might not have learned what would have quickened the faculties, and have been applicable to the occasions of common life; but because they could never learn the particular things taught at school; or not learn them in the particular mode which the usages of public education prescribe.

Home education therefore, in consequence of

its power of adaptation, may be made highly advantageous as well to ungifted as to gifted children.

A natural transition leads us next to consider another important advantage of private, as compared with public education; namely, that whereas, in the latter, the choice of things to be taught, and of the method of teaching, in each branch, is everywhere governed, either by actual statutes, or by immovable usages, and is moreover overruled, to a great extent, by secondary considerations of expediency, or by a perfunctory regard to what is the most facile or practicable, and is therefore neither very comprehensive, nor well proportioned—neither inclusive of all that should be taught, nor regardful of the several faculties of the human mind that ought to be trained; on the contrary, home education, inasmuch as it is free, or may be so, from every sort of despotism, or improper influence, is easily rendered (by whoever has skill to do so) in the fullest sense complete, as well in relation to the studies it is made to embrace, as to the faculties it endeavours to cherish. On this ground, if on no other, domestic culture possesses signal advantages; and the consciousness of them may well animate the exertions of parents who intend to adopt it.

And yet, as I would neither be, nor seem to be, the zealot of the domestic system, which I adopt and recommend, I am forward to allow,

first, that a school education which, on an abstract view of it, might be condemned as extremely partial and defective, may nevertheless, if vigorously conducted, subserve well enough the purposes of common, or even of professional life; and further, that the usual course of school education, is, in fact, as comprehensive as can fairly be expected, under the circumstances by which it is limited: nor must it be denied that, as a preparation for the labours and conflicts—the competitions and the crosses of real life, the rough treatment of school may be really preferable to the more refined and better digested, but milder training of home.

This concession being made, I do not hesitate to express my conviction that a private education, well devised, and carried into effect with energy and constancy, is the only sort that, altogether, deserves the name in a philosophic sense; nor do I despair of being able to convince intelligent parents and teachers that, on some such plans as those hereafter to be explained, and with the aid of a fair measure of ability, on the one side, and of natural capacity on the other, the intellectual faculties, whatever bias happens to belong to them, may receive a culture, and a preparation for culture, incalculably surpassing that which is ordinarily effected at school. Let it be granted that school education is as good as it can be, under all circumstances:—but home education may be good absolutely. The one conveys

certain easily communicated portions of learning; the other may impart the elements of all, in due proportion; and may put the mind in a position to accumulate knowledge in any one direction, with the greatest advantage.

Another, and a very material point of contrast, obtruding itself while comparing public and private education, is this, that, at school, and indeed in almost all cases of professional teaching —honourable as is the profession, and upright as may be the intentions of the teacher, there must, from obvious motives, be far more regard had to immediate and ostensible results—to the tangible product of the process of instruction, than to its remote influence and future effect, as bearing upon the adult development and actual employment of the faculties. Ordinary teachers, and even the most efficient and distinguished of them, are, almost inevitably, impelled by the wish, whether confessed or not, to make it appear, in no questionable manner, that they are fairly earning their remuneration, and are honestly rendering the *quid pro quo* to their employers. How conscious soever they may be of aiming always at the real advantage of their pupils, they can hardly have stoicism enough to sustain, in silence, the imputation, very likely to be thrown upon them by inconsiderate and ignorant parents, of not having imparted an amount of learning equivalent to the stipend received. The training of the mind with a view to *remote* results, is not

what can fairly be expected from professional teachers.

Moreover, the urgent influence of competition among teachers, and the stirring spirit of rivalry between public schools, have the same strong tendency to push forward whatever may be brought the soonest and the most certainly to a palpable issue. The visible and audible sum total of accomplishments brought home by a boy when he leaves school, is what must be thought of, and the thought of which must govern the methods of teaching, as well as determine the choice of studies, and the degree of attention that is to be bestowed upon each. Certain branches of knowledge, although of the highest intrinsic importance, are perhaps only in a low degree capable of being exhibited; and it is certain that there are methods of teaching what is taught which, while they invigorate the faculties, leave, in the memory, a smaller amount of particulars, such as can be adduced, or repeated.

I hope this statement of a main characteristic of school teaching will not be thought illiberal: assuredly it does not imply the presence of any motive of a discreditable kind; and if it involves any blame, it is a blame that should rest with parents, and must attach to public opinion, rather than fall upon those who have no choice but to meet the expectations of their employers, whether reasonable or not. Inevitable motives, not of mere interest, but of laudable professional

zeal, and proper ambition, must always render school education a system calculated to produce —speedy results ; and in its methods of procedure it must be more or less improvident, and in some degree wasteful of the intellectual vigour of the young : nor can it be expected that any improvements yet to be made, either in the science or the art of education, should materially affect a course of things which arises necessarily from the relative position of parents and teachers.

It is only at home that a principle altogether different is likely to be carried into effect, or that the remote consequences of early training should be admitted, without disturbance, to regulate the entire process. And yet, even at home, the influence of the very same motives must be guarded against in each instance in which parents avail themselves, as ordinarily they must, of the services of teachers of particular accomplishments. The home teacher, with a natural solicitude to justify himself, or herself, will always be tending to the same point- a quick and visible result ; nor in truth, are many parents able thoroughly to dismiss from their own bosoms the instinctive desire to see their children shine in comparison with others. Very much that is gratifying must be foregone when a clever child, who might easily have been made to blaze with various accomplishments, is quietly trained under a severe regard to what the future man may be, and do.

But throughout the present work it is assumed that parents, in deciding upon a home education for their families, have formed their resolution as to what they actually aim at; and that they possess the self-denying energy required for carrying on methods of culture, such as may not perhaps fully justify the principle embodied therein, until distant years come about, when the arduous engagements of life shall put that principle to the proof.

The doctrine so much talked of of late, and so eagerly followed by many, is that of DEVELOPMENT; and the question put on all sides is, "What are the readiest and the surest means of expanding the faculties at an early age?" But the very contrary doctrine is the one professed and explained throughout this work; for I am bold to avow my adherence to the principle of repression and reserve in the culture of the mind; and it is this principle which I would fain convince the reader may be put in practice consistently with the conveyance of really more information, or of information more comprehensive and substantial, than is usually communicated at school.

The principle of delayed development supposes a vigilant regard to be had to the spontaneous germination of the several faculties; and a due care also that the vitality of each should be preserved throughout the period during which its expansion and exercise are deferred. The rule

we have to recommend enjoins that excitement should be postponed, while nutriment is supplied; and in a word, that the mental force should be husbanded, much rather than used.

It is nowhere but at home that the experiment can be fairly tried, which shall prove whether, along with a full measure of mere learning, a far more vigorous expansion of the higher faculties at eighteen, than is often witnessed, may not be effected, by a thorough-going adherence to this rule of postponed excitement. It must be at home, if at all, that the force and fruitfulness of the mind may be kept in bud, until the natural summer-time of action comes on.

But it is manifest that we must not venture thus to delay the expansion of the faculties, unless we are able to calculate, pretty surely, upon commanding the future opportunity to carry forward the process of culture beyond the usual term of school education. If children are to be removed from our care, and are to abandon the means of improvement as they enter their teens, no choice is left us, but to develop the mind as quickly as we can. A somewhat different case is however supposed throughout the present work.

Little perhaps now remains to be hoped for, in relation to public education, beyond the gradual extension of the existing system, until it shall have embraced all classes of the community. But home education unquestionably is in itself

susceptible of indefinite advancements; and especially by the means of a well-digested system of slow culture, such as, while it animates without expending the early forces of the mind, makes preparation, during the former half of the entire period of education, for the exercises and labours of the latter half.

The full conviction I entertain of the possibility of greatly enhancing the intelligence of individuals, and so that of the community, by giving effect to the principle now spoken of, has been a main motive in impelling me to undertake the present work.

The practical decision which a teacher will be required to come to, when he has made his choice between a hastened and a delayed system of development, must relate principally to the three following questions, namely,—First, What is it which, at certain stages of the process of education, should be taught, and what is better held in reserve? Secondly, How far, in each department of knowledge, when it has been taken on the list, should instruction be carried beyond the rudiments? And lastly, which of the faculties is it that ought, in compliance with the order of nature, to be early cultivated, or aided in its spontaneous expansion, and which should be held in check; or at least not elicited, until a more advanced period?

Now it is the last of these three questions that is at once the most important, and the most

difficult; and in seeking guidance on this ground it must be confessed that very little comes to our hand that is distinct and practical. Much more has been said and written concerning the things that are to be taught, and the method of teaching them, than concerning the faculties of the mind that are to be trained, and the natural order of their development. In suggesting, as I shall have to do in the following chapters, various hints on this subject, I hope to observe the caution proper to one who is advancing upon a path not much trodden.

I ought perhaps at once to preclude the probable supposition that the principle of delayed development implies either ignorance, or inertness of mind, at any stage of the process: for, on the contrary, I believe that the plans forthwith to be recommended, may secure a higher mental energy, and that more may be taught (or more of general knowledge) than is often attempted, in methods that do not impair the elasticity, or exhaust the force of the mind, and such especially as do not breed a distaste for learning.

The distinguishing recommendations then, of private education (intellectual culture only now considered) are—1st, That the stress of the process may be made to rest upon the best sentiments, and upon the reciprocal affections of the teacher and the taught, instead of its falling upon law, and routine, and mechanism: 2dly,

That every thing, in method and in matter, may be adapted to the individual capacities and tastes of the learner, and the utmost advantage secured for every special talent: 3dly, That it is, or may be, wholly exempt from the incumbrance and despotism of statutes, or of immemorial, but perhaps irrational usages, or of prevalent notions; and may come altogether under the control of good sense; and is free to admit every approved practice: and 4thly, That, whereas public education is necessarily a system of hastened development, private education is free to follow out the contrary principle of retarded development.

If it had come within my purpose to discuss the general question of the comparative advantages, on the whole, of the two systems, many other points must have been adverted to; and especially so, if the moral and religious bearing of the subject had been included in such an argument. But although this general question is here held in abeyance, I would not even seem to be unmindful of the many and powerful reasons which may induce parents, even if home education be in their case practicable, yet to send their children, or at least their sons, to school. Such are—the superior practical ability of masters who have devoted their lives to particular branches of instruction;—the advantage, so important to boys, of finding their level among many;—the stirring and healthful influ-

ence of emulation;—the means of acquiring self-confidence, and the probability of learning common discretion, as well as pliability, on that wider field; and not least, the salubrious animal excitement, the buoyant inspiration of high sport, which is to be had in the play-ground, and for which it is extremely difficult to find an efficient substitute in the quietness of home.

But then, if we were thus to go into the general question, we must put in the other scale beside the merely intellectual advantages stated above, those reasons which spring from the fact (hardly to be denied) that home is the place where, if at all, purity of sentiment is to be preserved from contamination, where the domestic feeling may be cherished, and the heart and tastes refined; and where, especially, religious knowledge, religious habits, a genuine conscientiousness, and an unfeigned piety, may best be imparted, conserved, and promoted. These reasons will, with some parents, outweigh every other consideration; and yet such would do well to remember that there is a balance, even in relation to the *moral* welfare of children, and that an extreme anxiety to seclude young persons from all knowledge of, and contact with the evil that is abroad, induces, often, a reaction, worse in its consequences than an early and unreserved acquaintance with the world as it is. None are more likely to meet with cruel disappointments than those parents who trust too

much to the innocence and ignorance which they think they can preserve within the sacred precincts of home; for such are often astounded by the discovery of the simple fact that the human heart wants very little infection from without, to render it liable to the most fatal disorders.

But dismissing this wide and difficult question, and the many subjects it would lead to, I yet feel inclined, as a not improper preliminary to the following chapters, to adduce some general considerations, recommendatory of home education; although by no means implying that it should always be preferred. My immediate object is not so much to prevail upon parents to train their children at home, as to fix the purpose, and to encourage the endeavours of those who may actually have come to that decision.

I shall briefly point out, then, what would probably be the influence, upon the community, of the prevalence, to some extent, of Home education, as concomitant with, and subsidiary to Public education. What I mean to affirm is this—that, even if schools, and large schools, were granted to be generally better adapted to the practical ends of education than private instruction, and that the majority, of all ranks, should receive their mental culture in that mode; nevertheless, that the welfare of society, on the whole, demands the prevalence, to some considerable extent, of the other method; and that a

portion of the community—of the middle and upper classes especially, should come under that very different and more intimate process of culture of which home must be the scene. The school-bred man is of one sort—the home-bred man is of another; and the community has need of both; nor, as I think, could any measures be much more to be deprecated, nor any tyranny of fashion more to be resisted, than such as should render a public education, from first to last, compulsory and universal.

It is found in fact that a firm individuality, a self-originating steadiness of purpose, a thoughtful intensity of sentiment, and a passive power, such as stems the tide of passion and frivolous opinion, belong, as their ordinary characteristics, to home-bred men; and especially to such of this class as are self-taught. Now we affirm that, whatever may sometimes be the uncompliant sternness of persons of this stamp, yet that a serious, and perhaps a fatal damage would be sustained by the community, if it were entirely deprived of the moral and political element which these bring into the mass. As the social machinery must come to a stand if all possessed so fixed an individuality as to think and act without regard to the general bent of opinion; so would it acquire too much momentum, if none were distinguished by habits of feeling springing altogether from within.

In schools, and especially in large schools,

the two lessons learned by boys—sometimes by two classes of tempers, but often by the same individuals at different stages of their course, are the lesson of domination, and the lesson of abject compliance with tyranny. Even the degree in which, of late, public attention has been directed toward the evils whence so much mischief has been proved to arise, has not availed to alleviate them more than to a very small amount; nor can it be doubted but that, as well the habit of tyrannizing, as the habit of yielding servilely, notwithstanding the correction they may receive in entering upon life, must, more or less, continue to affect the dispositions of men; and must in a real, if not in a very conspicuous manner, exert an influence over the political temper and movements of the community.

But a very different class of feelings belongs to young persons educated at home, and who, although perhaps they may not be prompt to contend for the foremost positions in society, are wholly unprepared to cringe before arrogance and oppression. They have moreover acquired in seclusion that decisive individuality of temper which impels them on all occasions to search for a reason, satisfactory to themselves, before they bow to the dictates of those who have no right to their submission. Moreover, the bosoms of young persons who have been well trained amid the gentle influences of the domestic circle, and

have lived in the intimacy of intelligent and ingenuous parents, and of other adults, are likely to be fraught with profound and delicate sentiments—with the love of truth, of justice, and of honour; and they are therefore equally disinclined either to exercise despotism, or to yield to it. Young men so nurtured under the paternal roof, when, for the first time, they encounter the rude wilfulness, and the selfish violence of vulgar spirits in the open world, may perhaps recoil, and be tempted to leave the field in disgust: but they presently (if not naturally feeble-minded) recover their self-possession, and plant their foot firmly in the path where what is just and good is to be maintained against insolent power, or lawless aggression.

The substantial liberties of a community involve much more than either the bare protection of persons and chattels, or the ample exercise of political rights; for there is a liberty of thought and of speech which may be curtailed, or almost destroyed, in countries that are the loudest in boasting of their freedom. There is a liberty, moral and intellectual—the true glory of a people, which consists in, and demands, the unrestrained expansion of all faculties, the exercise of all talents, and the spontaneous expression of all diversities of taste, and of all forms of individuality. But this high liberty of mind, forfeited often in the very struggle of nations to secure or to extend political liberty,

must assuredly be favoured by whatever cherishes distinctness of character; and it must as certainly be endangered by whatever breaks down individuality, and tends to impose uniformity upon the whole.

In this view, a systematic HOME EDUCATION fairly claims no trivial importance, as a means of sending forth, among the school-bred majority, those with whose habits of mind there is mingled a firm and modest sentiment of self-respect—not cynical, but yet unconquerable, resting as it will upon the steady basis of personal wisdom and virtue. It is men of this stamp who will be the true conservators of their country's freedom.

It may accord well enough with the designs of the promoters of despotism, whether democratic or monarchical, to enforce public education, both among the lower and the upper classes: nor indeed could any species of lawless power be secure so long as, from the bosom of many homes—homes sacred to truth and goodness, there were continually coming forth those whose minds have not been drilled to move in rank and file—who wear no livery of opinion, and whose undefined tastes are as decisively opposed, as are their formal principles, to arrogant usurpations of whatever name.

If we suppose home education to be very rarely practised in a community, while public education should prevail; it must happen that all methods of teaching would tend continually

toward uniformity, and would, every year, with fewer exceptions, be ruled—if not actually by law, at least by fashion, until at length, either by statutes, or by usages which none would dare to infringe, the particular course of study, and the modes of instruction, would become everywhere the same; so that youth, hearing the same things, in the same tone, on all sides, would be moulded into a temper of unthinking acquiescence.

But instead of this, only let the practice of home education be mixed, in a fair proportion, throughout a country, with that of public education, and then any such dead uniformity must be broken up. Busy law, or intolerant fashion, may rule absolutely in colleges and schools; but neither the one nor the other will so easily invade families. Family training possesses a spring of diversity; it will be spontaneous in its modes of proceeding, various in its results, as well as in its measures; and will, on these accounts, impart a marked character to those who come under its influence.

And yet, were the worst to come—or the worst in this particular view of our subject, and were public education to prevail still more extensively than it does, as necessary for boys, we should nevertheless have much to rely upon in counteraction of the evils thence resulting, so long as female instruction were, in a good proportion of instances, conducted beneath the

paternal roof. But what idea can be more gloomy than that of a community which, spartan-hearted, should denounce as "weak and unpatriotic," the parental fondness that detains daughters at home, and should hold in contempt every sentiment that endears privacy as the scene of the gentle affections! In England we do not wish to see the "Female Gymnasium."

The reasons that impel us to admit the desirableness, and often the necessity of sending boys to school, apply very partially, if at all, to the education of girls; nor do I hesitate to profess the decided opinion that, for these, home education is always to be preferred, unless, from the circumstances of a family, there be some special difficulty in the way of carrying it into effect. And let but the home education of girls be amended a little in system, and be more generally adopted than it is, and then the influence of the sister, the wife, the mother, as well as of women in society at large, will directly tend to supply what has been lost of right feeling, and to repair what has been injured, in the course of the public education which boys have passed through.

Girls should then be educated at home with a constant recollection that their brothers, and the future companions of their lives, are at the same time at school, making certain acquisitions indeed—dipping into Greek, and the like; but receiving a very partial training of the mind, in

the best sense; or perhaps such a training only as chance may direct; and that they will return to their homes, wanting in genuine sentiment, and in the refinement of the heart. Girls, well taught at home, may tacitly compel their brothers to feel, if not to confess, when they return from school, that, although they may have gone some way beyond their sisters in mere scholarship, or in mathematical proficiency, they are actually inferior to them in variety of information, in correctness of taste, and in general maturity of understanding; as well as in propriety of conduct, in self-government, in steadiness and elevation of principle, and in force and depth of feeling. With young men of ingenuous tempers, this consciousness of their sisters' superiority in points which every day they will be more willing to deem important, may be turned to the best account, under a discreet parental guidance, and may become the means of the most beneficial reaction in their moral sentiments.

Parents, therefore, in the education of their daughters at home, will do well to keep in view this double intention of the course they are pursuing; and while bestowing their cares immediately upon these, recollect that they will have to exert an influence hereafter, such as will make itself felt far beyond its immediate objects.

Nevertheless throughout this work I must assume that family education embraces sons as

well as daughters; and indeed it is proper to advertise the reader that, either a sort of intellectual culture, or a rate of proceeding, is recommended which, to its full extent, may not be found applicable to the female mind; or which, even if it be applicable, is not necessary, perhaps, or desirable. In the exercise of the higher faculties especially, hereafter to be described, I must be understood as supposing the presence of boys; and therefore some slight remission or modification of such methods may be found requisite, if girls alone are under tuition; for it will generally be true, not only that boys surpass girls in the expansion of the reasoning and inventive faculties, but that the presence of the former will make it practicable to carry the instruction of the latter much further than could otherwise be attempted. Home education, including sons and daughters, and where high and pure principles are adhered to, may reach a point not to be attained without this admixture.

And how happy is that domestic circle within which, while intellectual culture, in all its compass is going on, under the most auspicious yet mild excitements, the warm and delicate domestic affections—the reverential friendships of children and parents, and the gentle and animated friendships of brothers and sisters, are being cherished!

CHAPTER II.

HAPPINESS, THE NECESSARY CONDITION OF HOME EDUCATION.

IT need hardly be said that the happiness which we speak of as a necessary condition of home education involves much more than what could claim to be introduced while treating of intellectual culture merely. Family happiness is the fruit of a sound and vigorous moral and religious training; and it mainly consists in the prevalence of those sentiments which such a training should diffuse.

But even although these momentous subjects are not strictly included in the intention of the present volume, they might yet find a place, incidentally, inasmuch as that, apart from the felicity which is the fruit of virtue and piety, even the intellectual culture of a family must be obstructed; and the success of the entire process of instruction will be rendered very doubtful.

Yet since, to do justice to a theme so important and so various, would occupy a volume, the

subject must of necessity be now adverted to only in a casual manner, and merely so far as some reference to it is requisite for conveying a general idea of the domestic educational economy, such as we conceive of it.

Moral training then, using the term in its fullest sense, is affirmed to be a pre-requisite to intellectual culture, as well for other reasons, as because it is the indispensable condition of that FAMILY HAPPINESS, deprived of which the mental faculties either languish, or become perverted; the mind losing at once its spring, and its equipoise. Scarcely a half of that invigorating treatment of the reasoning powers, or of that refined culture of the tastes, which we shall in the end have to speak of, could be carried into effect in a family liable to the gloom and the storms, the harsh measures and the vexations, that attend domestic disorganization, misrule, and the prevalence of malign dispositions.

Moreover, as the carrying fully into effect a system of home education, involves not a little toil, and must impose many restraints upon parents, they will find the need of motives more vivifying than a mere sense of duty, to animate their endeavours. Home must be a sanctuary of exhilarating enjoyments, as well as an abode of peace. The labours of every day must be relieved by the constant return of tranquil pleasures, and heartfelt delights.

But the actual felicity realized at home, and

the consequent success of the various processes of instruction, will turn very much upon the IDEA which, from the first, parents entertain of it. Consistently with a sober regard to the inevitable conditions of human life, the brighter is the conception which, at the commencement, we have formed of family happiness—the more happiness shall we be likely to secure, and so much the more prosperous will be our course in conducting the duties and labours of a domestic system.

The adage—O too happy, did you but know it, might often be applied to a family. The means of enjoyment actually within our reach, are frequently lost sight of, or are but poorly improved; and it so happens that those who might have tasted, year after year, the highest felicity which earth admits of, have been less happy in fact than some who are deemed by the world unfortunate. It may not then be out of place to adduce certain considerations, although of a very obvious kind, and such as are within the reach of every one's recollection, but which may serve the purpose of placing, in a more distinct point of view, the COMMON MEANS of family happiness.

A family then, let it be remembered, is a little world, furnished with the means of preparation for meeting the duties and difficulties of the real and great world; but yet exempted entirely, or

in great measure, from several of the chief sources of uneasiness which abound abroad.

In the real world, for instance, those stern motives of necessity which urge men, in their several lines, to struggle with their fellows for obtaining, or for securing, first the means of existence, and then the means of pleasure, impart, whether distinctly thought of or not, a depth and intensity to the selfish principle. But within the secure circle of home, and in a family enjoying only a moderate and ordinary competency, nothing is known of any such harsh and chilling motives. No disparagement, no privation is to be endured by some of the little community, for the aggrandizement or ease of others. Along with great inequalities of dignity, power, and merit, there is yet a perfect and unconscious equality in regard to comforts, enjoyments, and personal consideration. There is no room either for grudges, or for individual solicitude. Whatever may be the measure of good for the whole, the sum is distributed without a thought of distinction between one and another. This single circumstance, simple as it is, and little as it may be thought of, would, if duly attended to, enable parents to cherish with more success those bland sentiments the development of which it favours. Refined and generous emotions may thus have room to expand, and may become the fixed habits of the mind, before adverse principles have come into play. Home is a garden, high-

walled toward the blighting north-east of selfish care.

Again: within the circle of home each individual is known to all, and all respect the same principles of justice and kindness. There is therefore no need for that caution, reserve, or suspicion, or for those measures of defence and restraint, which, in the open world, are safeguards against the guile, the lawlessness, and the ferocity of a few, and which are never altogether out of sight or out of mind. But these operate to depress very much the level of the generous sympathies, and to chill or deaden the happiest emotions of our nature. It is otherwise within the republic of home, where the most absolute confidence, and an unchecked good-will may, and ought always to prevail; nor need any noble and generous sentiment be there suppressed or disguised. On this ground then, if we use it, we possess a capital advantage, and a main means for raising the happiest feelings to a high pitch, and for keeping them there.

It is furthermore a circumstance tending directly, if understood and properly improved, to secure the happiness of home, that the form of government established there is absolute, and is founded upon an indubitable superiority of power, as well bodily as mental. Only let the supreme authority, in any community, be at once the most wise, the most kind, and personally the strongest of all; and then a very large

portion of the woes and cares that infest the real world are provided against and excluded. Nothing else but absolute monarchy would be desired by mankind, if kings could be had, such precisely, in relation to their subjects, as a good and wise father is in relation to his children. The supreme parental power wisely exercised, is a most efficient means of happiness to all.

But the principal fact, the recollection of which is important with the view of securing family happiness is—that beneficent constitution of our nature, which renders infancy and childhood, as distinguished from youth and manhood, the season of spontaneous felicity. Every one must be aware of this fact; and yet the consideration of it enters far less than it should into our plans of domestic management.

The natural felicity of childhood might in truth be assumed as the guiding principle of all education; and most especially so of that which is carried on at home; nor can we well attribute too much importance to the knowledge and recollection of it, as the rule and reason, the means and the end, of almost every thing that is attempted in carrying the domestic system into effect.

Warm-hearted parents (or at least the mother) may perhaps almost resent the officiousness of a writer who, with superfluous zeal, as she will think, would go about to induce her to pay more regard than hitherto she has done, to the happiness

of her children; or who, with such a purpose in view, should endeavour to point out that peculiar constitution of the infant mind, by which its felicity is secured, so far as it can be, by general laws. I am nevertheless inclined to incur this risk; and moreover to lay myself open to the charge of insisting upon what "every body understands," while I dwell a little upon a subject inseparable from the task I have undertaken, and mainly connected with every part of the system of culture hereinafter to be spoken of.

Adults look for *external* means of enjoyment, and seek happiness in the gratification of specific wishes or desires; but an infant—simply protected from positive suffering, is happy from the stock of its own resources, and by the perpetual gush of joyous emotions, having no determinate direction as they burst abroad like rills from a hill top, and which sparkle and dance as they glide away.

Every one who is not too fastidious, or too supercilious to give attention to facts of this sort, must have admired the pertinacity of nature (if we might so speak) in securing the felicity of childhood under circumstances the most adverse or adverse in our view. Particular instances of ill health, ill treatment, or ill temper excepted, children are as happy as the day is long, although grimed and grovelling about the gutters of the courts and lanes of London or Manchester: much more certainly are they happy—tattered,

dirty, and ruddy, at the door of a hut on a common or road side:—they are happy, more than might be believed, in the cellar or the garret of the artizan, or in a jail, or even in a poor house! Nay, it must be granted by attentive and impartial observers, that the balance of joyousness would sometimes, and perhaps often, be on the side of children in some of these luckless positions, if put in comparison with those who, with golden ringlets and brilliant skins, make groups for the painter upon trim lawns, in front of sumptuous mansions; for it is true that while, on the one hand, the spontaneous happiness of childhood requires only to be defended from positive disturbance, on the other it may be curtailed, or totally dissipated, by an excessive and anxious interference, intended to promote it.

The happiness of children is not a something to be procured and prepared for them, like their daily food; but a something which they ALREADY POSSESS, and with which we need not concern ourselves, any further than to see that they are not despoiled of it. This simple principle, if understood, trusted to, and constantly brought to bear upon the arrangements of a family, would at once relieve the minds of parents from an infinitude of superfluous cares.

Those laws of the human mind whence the spontaneous felicity of childhood results, it may be well for a moment to advert to. It is common to say, or to assume, that children derive

the principal part of their enjoyments from the freshness and novelty of every thing that surrounds them: and that objects which have long ceased to awaken the slightest pleasurable emotion in the mind of the adult, give a vivid delight to the infant, merely by their newness. But this is not a very exact statement of the case, and is much rather true of youth, than of infancy and childhood. It is after the period of childhood has gone by, that the mind wakes up, sometimes on a sudden, to a joyous admiring consciousness of the external world, as if just ushered into a fairy palace of wonders. Before the time of this quickening of the mind, it is very difficult to excite the same sort of emotions. A child—let it not be deemed paradoxical, a child draws its happiness, with very slender aid of external means, from the boundless field of its own conceptions, and from the treasures of its own unspent emotions. A young person, on the contrary, asks large supplies of external excitement, and is ever eagerly in quest of extrinsic means of gratification. During the first period of life, the soul is occupied in evolving the elements of interior happiness; during the second in imbibing them: that is to say, in gathering new materials for future combinations.

Man, as compared with the inferior orders around him, is distinguished by the vast extent, as well of the pains as the pleasures he is susceptible of, beyond the limit of his merely

animal sensations; and this extension of sufferings, or of enjoyments, springs from the working of the mind—the conceptive faculty especially, upon the organic elements, whether of pain or of pleasure. And these mental extensions of pleasure and pain are proportionately the greatest in those cases in which the bodily sensation is the least intense. In all instances, and most so in those of the kind last named, man suffers or enjoys a hundred times more than is possible to the brute.

But on this ground there is to be noticed a striking peculiarity of childhood, as distinguished from adolescence and manhood; and it is this, that, whereas the PAINS of the infant are scarcely if at all extended beyond the limit of animal uneasiness, its PLEASURES are expanded, and compounded, and enhanced, incalculably beyond the simple organic gratification. While therefore its pains are as one or as two, its pleasures are as ten, or as a hundred. A child, as compared with an infant, has learned to extend his sufferings a little beyond the limit of animal sensation; but then, in a still larger proportion, he extends his pleasures beyond that boundary; the balance therefore is much on the side of happiness.

Let any one, familiar with children, analyze a child's tranquil felicity while amusing itself, for an hour or more, with nothing better than a crooked stick, or a handful of pebbles. What can be the bare gratification of the sense of touch,

or of the muscular power, or of the sight, which such objects can convey? It must be reckoned as extremely small; nor is it possible to watch the movements and countenance of an infant of fifteen months, or two years, whilst so engaged, and fall into the great error of supposing that its delights are chiefly animal. It is the MIND, it is the rich, grasping, excursive human mind (such even in infancy) that is at work on the poor materials of its felicity. This crooked stick, or these pebbles are symbols of many things we adults do not dream of in such a connexion; and they suggest conceptions of things dimly recollected, and now absent, which crowd the fancy, and lead it on, until the soul is lost in the chace.

This happy characteristic of infancy, namely, the disproportionate mental enlargement of pleasures as compared with pains, attaches also to childhood in a modified form, and is observable until the period when the ripened powers of reflection, and a more ample knowledge of the conditions of human life, induce a new order of things, and so far turn the scale that the ideal expansions of pleasure and pain come to be nearly equal. During childhood, while the power to enlarge sufferings by reflection, advances very slowly, and is scarcely more in the tenth year than it had been in the third, the propensity and the power to expand enjoyments beyond the limit of animal gratification are continually increasing. Thus for example, a child of three years old,

creates for itself, from a stick, a stone, or a straw, a long continued and tranquil delight; but a boy of ten or twelve, with materials quite as meagre in proportion to the pleasure drawn from them, though they be of a rather different sort, such as a score or two of tiles, and a bundle of sticks; or a hammer, a gimlet, and nails, will furnish for himself an intensity of happiness; to which he will eagerly return, day after day, spending hours in an employment which derives ninety-nine parts out of the hundred of its power of fascination from what the mind adds to the tangible material of its pleasures. Such instances might be compared to those manufactures in which a pennyworth of iron, or of cotton, is, by the skill bestowed upon it, so enhanced in value as to be worth a guinea.

It is not often before the seventeenth or eighteenth year, that the balance begins to turn, and that the mind, revolving more upon itself, recollecting more, anticipating more, as it actually knows more, acquires the habit of expanding its pains in a proportion nearly as great as that in which it expands its pleasures. It is then that the high pitch of boyish joyousness is lowered, never again to stand steadily so high: and it is then that the deeper emotions and energies of the soul are brought into play, by the stress of disquieting reflections.

But childhood has few regrets, and still fewer anticipations, nor any of an anxious sort; nor

does its open eye ever turn from the bright objects of the world around it, to penetrate the mists that shroud the future. The frivolous and elastic gaiety of children, even when they may have been informed of some domestic calamity, must have attracted the attention of every one; and although we do not wonder on such occasions, we cannot but admire that constitution of the mind, which during the period when there can be no responsibilities, and when there are no duties to be performed—when solicitude could be of no utility, spares the growing mind and body the burden of care.

And yet we should not stop short with the sentiment of mere admiration in such instances, but should draw from this fact—that the Author of our nature has made so special a provision for securing the happiness of childhood, an inference of high practical importance, and it is this, namely, That what the Creator in his beneficence plainly intends, we are bound by all means in our power, to promote; or in other words, that it is nothing else than a religious duty, to make the happiness of infancy and childhood our main care in whatever relates to early education; and this happiness, as every one knows, demands imperatively, good government, and moral training.

This first law of education—sanctioned as it is by the clearly-expressed will of God, must be held to condemn at once every mode of instruction, and every principle of treatment, which in any

degree trenches upon the felicity of early life; and it must be said too, and on the same ground, that a stern and gloomy temper, as well as an irritable one, in a parent or teacher, is a decisive disqualification for the task of education: especially it should be remembered that, while the unhappy temper of the master of a school bears upon the minds of children only occasionally, and partially, and still leaves room for enough of thoughtless hilarity; the very same temper in a parent or a private instructor, cannot fail to exclude almost every ray of joy from the narrower precincts of home. A home, under such auspices, will be scarcely better than a prison, whence the luckless inmates will wildly rush the moment it is possible for them to do so. An austere master is but as one to forty, sixty, or eighty; but an austere father, or a crabbed mother, sourly loquacious, is as one to three, or five, or eight; and so large a proportion of the ingredient of bitterness will be more than enough to spoil happiness.

The recollection of a thoroughly happy childhood (other advantages not wanting) is the very best preparation, moral and intellectual, with which to encounter the duties and cares of real life. A sunshiny childhood is an auspicious inheritance, with which, as a fund, to commence trading in practical wisdom and active goodness. It is a great thing only to have known by experience that tranquil, temperate felicity is actu-

ally attainable on earth; and we should think so if we knew how many have pursued a reckless course, because—or chiefly because, they had early learned to think of HAPPINESS as a chimera, and had believed momentary gratifications to be the only substitute placed within the reach of man. Practicable happiness is much oftener wantonly thrown away, than really snatched from us; but it is the most likely to be pursued, overtaken, and husbanded by those who already, and during some considerable period of their lives, have been happy. To have known nothing but misery is the most portentous condition under which human nature can start on its course.

Due care being taken to elicit the benevolent sensibilities, it is the happiest children who (natural dispositions allowed for) will be the most sympathetic, and the most ready to forego personal gratifications for the relief of the wants of others. The principles, and the habits of feeling whence, in after life, a course of self-denying beneficence should take its rise, are best founded upon the personal experience of much felicity; and if angels are more benevolent than men, it is, we may believe, because they are themselves conversant with the highest happiness.

Continued gloom and depression during childhood and youth, debilitate as well the body as the mind; and we may be sure that whatever enfeebles the constitution vitiates it. Under the irritation, or the melancholy, that attend harsh

treatment and a want of natural enjoyments, the animal secretions receive a poison which breaks out in the temper, and constitutes at length malignant character. It is in the sunshine literally, and in the sunshine metaphorically, that the human body and mind reach their blooming perfection.

I am far from intending to deny that, in particular instances, virtue and constancy have been learned in the school of early adversity; or that the worst of all influences—cruel treatment, may not, in rare cases, have favoured the development of the best dispositions. But it can never be affirmed that any such desirable consequences follow as the ordinary effects of such causes: on the contrary, it is certain that, with very infrequent exceptions, a sorrowful childhood generates a morbid incertitude of mind, an irresolution and a sensitiveness, very likely to yield to the first strong temptations. There is a timidity and reserve, the fruit of misfortune, or of unkindness, which sets the judgment wrong, and impairs, in an equal degree, the proper ingenuousness of youth, and the force of native good sense, leaving the mind too little defended against the inducements to a course of meanness and hypocrisy. Under unpropitious and unjoyous circumstances in early life, intelligence passes off toward cunning; obstinacy takes the place of firmness, and of conscientiousness; recklessness supplants courage; and worst of all, or as the completion of

all, a cold selfishness settles down upon the character. It is in this way, so often, that, among the lowest classes, and the wretched, a ferocity is engendered to which no crimes can be startling. And generally it may be said that, if more sensibility is found in the middle and upper, than in the lower ranks of society, it is because by the former, fewer ills have been endured in childhood, and a more tranquil felicity has been enjoyed.

If remarkable cases of depraved dispositions of the malign sort were examined, we should only need to be told the history of the early life of the individual, and should often find the reason of this perversion to have been, not so much an original fault of temperament, as simply the want of felicity in childhood. And it is certain that many a one—the darling of fortune, and the pet of maternal fondness, has, through the mere whims of a crotched temper, though perhaps a fond one, been totally deprived of the natural joyousness of childhood.

To return to our proper subject, I must express the belief that the influence of a gaily happy childhood upon the development of the INTELLECTUAL FACULTIES is far more direct than has often been considered. That which is so important to the vigour and the practical efficiency of the understanding, namely, the symmetry of the mind, and the subserviency of subordinate faculties to those that ought to bear sway, depends very much, not to say absolutely, upon the un-

disturbed expansion of the several powers in early life. But it is certain that any kind of suffering, or an habitual melancholy, or a perpetual irritation, operates at once to repress some, and to force others of the mental energies; especially giving undue influence to certain emotions which should not at all bear upon the mind until the judgment is ripened; while it dissipates those gentle and pleasurable sentiments from which alone intellectual excitements should be drawn.

Besides, inasmuch as depression of any sort impairs the animal energy, and disturbs the digestive functions, the injury never fails to reach the brain, which presently betrays the confusion that has taken place in the system. Hence results a general indistinctness of mental apprehension, favouring the formation of distorted notions, which cling to the mind, ever after, in the form of constitutional prejudices. Hence too a general indisposition to think, and a fixed disinclination to listen to reason. How common is it to meet with sickly and irritable minds that start up in opposition to any calm statement of facts, with a sort of instinctive resentment or trepidation, as if fearing to be entrapped by plain truth. Such a state of mind may, as I think, most often be traced to circumstances of early life, which were of a kind to call up the principle of self-defence, long before reason had been developed. The child, harshly or capriciously treated, had

learned to thrust and to parry, before it had learned to think and judge. But nothing in intellectual training can be more important than that the reasoning power should have come fully into play, and should have acquired considerable firmness and vigour, before the time when it is likely to be exposed to the onset of vehement motives. So to preserve the reason from strong influences, of any sort, in early life, might be termed the CRITICAL PRINCIPLE of education. Let then children and young persons enjoy a tranquil happiness, to the latest period possible, with the very intention of leaving reason to reach its adult proportions, unwarped.

We have already said that the office of parental care is not to create happiness for children; but only to preserve from disturbance that spontaneous happiness which is the gift of nature. Now this disturbance is likely to arise, in the first place, from ill health; and who does not know that neither the most judicious treatment, nor the most favourable external circumstances, will certainly avail to avert occasional suffering, or even constitutional and continued sickness? But this allowed, it may unquestionably be affirmed that, in the large majority of instances, a state of general ill health during childhood arises from causes which, if parents have but the requisite good sense, may easily be averted. Foolish indulgences, and a pernicious pampering of the appetites; or an undue caution, and excessive

delicacy of treatment; or an ignorant remissness; or sometimes the carrying out of some absurd and extravagant physical doctrine; or an ambitious and cruel exaction of tasks;—these, or such like, are the causes or the occasions of nine-tenths of all the ill health under which children and young persons labour; nor should I hesitate to leave even a smaller proportion to those causes over which we can have no control.

As it is true that children will be happy unless prevented from being so by external influences, so it is true that (a few cases excepted) they will be robust, or at least, ordinarily well, unless grossly mismanaged or neglected. To be convinced of this, we need only observe what an accumulation of unfavourable circumstances children will resist, and yet be healthy, so long as they enjoy—plenty of light—plenty of air, and plenty of the very plainest nutritious food. In the constant possession of these three prime elements of animal well-being, every thing else which, in our prison nurseries, is believed, or is actually found to be important may be dispensed with:—cleanliness may be foregone;—judicious treatment may be foregone; solicitude about wet, and cold, and heat may be laid aside; only afford to the human animal—light—air—and as much wholesome food as he really desires, and you need think no more about him; at least so far as the body is concerned, all is nearly as well as it can be. But the moment when the

child of nature is consigned to the imprisonment of a carpeted nursery, and is assiduously cared for in some points, he must be equally cared for in all. Mischief comes from the doing by halves that which a refined method of treatment requires to be fully and consistently attended to.

An ill understood and a capriciously administered artificial system of physical treatment, displays its consequences in a sad variety of symptoms; such are the opaque uncoloured complexion uniformly sallow, or the alternating flush and pallidness of the cheek; the flaccid muscular substance—hardly to be called *substance*; the yielding spine, the dyspeptic caprices of the appetite; the wayward and fretting temper, and the confused and inapplicable mind. These are the ills, so often meeting the eye, which, springing from sheer want of common discretion in the early treatment of children, are, immediately and remotely, the causes of a very large proportion of all the sufferings and sorrows that oppress humanity in civilized communities.

In thinking then of a happy domestic system, nothing less can be assumed than that there is, on the part of the mother, intelligence and good sense enough to secure for a family (under ordinary circumstances) a fair degree of health and animal well-being. Or to exclude objections, we must suppose that a family is so managed, in what relates to the body, as that as much health is actually enjoyed as the very same children—

or children endowed with precisely the same amount of constitutional vigour, would have possessed, had they been born and reared in a well-managed cottage by the road side.

Next to ill health, it is ill temper that most often invades and dissipates the natural happiness of childhood;—ill temper ordinarily arising from obvious, or from latent ill health. But it would only be favouring a dangerous error to attempt to treat the copious and difficult subject of TEMPER, apart from those moral and religious principles which, whatever may be the immediate occasion of unhappy dispositions, must constitute the basis of a remedial discipline.

Instead of injuring subjects so momentous by a hasty and imperfect treatment of them, I will assume that they hold, as they ought, the first place in the minds of parents; and that our IDEAL HOME is blessed with the sunshine of piety, and that it enjoys moral, as well as animal health.

There are however some incidental subjects, more or less nearly connected with the moral condition of a family, and at the same time having a direct relation either to the principles, or to the practices of INTELLECTUAL culture. To these I shall briefly advert, before we enter upon the detail of our methods of instruction.

In the first place then it may be suggested,

that, with due discretion as to the mode and the times, children who are actually happy, or are furnished with all the means of being so, may be reminded of the felicity of their position; and especially as compared with that of too many around them. A little in this way may be enough: and it is better to attempt nothing, than to run into the fault of turning the mind much in upon itself; or of generating a musing hypochondriac sensitiveness, the fruit of which is sure to be, not a grateful cheerful sentiment of complacency in our own lot, but a wistful repining thought of the imagined happiness of others.

This error carefully avoided, just so much may be said as may serve to awaken a consciousness of the felicity actually enjoyed, and especially on occasions when some indulgence is to be foregone, or some restriction is to be assented to; and moreover, if a religious feeling pervades, as it ought, a family, and if a frequent reference is made to the divine goodness, as the source of every enjoyment, the most auspicious sentiments may be generated in the hearts of children by a grateful recognition (informal in phrase and mode) of FAMILY HAPPINESS, as the gift of God.

Moreover, it is well that children should fully feel and know, not merely that their parents seriously intend their welfare; but that they are inclined to do every thing that is wise and practicable, to promote their mere ENJOYMENTS, and

to procure for them every incidental pleasure which ought to be wished for. This conviction, settled in the minds of children—a conviction strengthened and renewed by frequent proofs, operates powerfully in enabling parents to carry forward those measures of government which may demand silent and implicit submission. Where an animated parental love, showing itself in the promotion of enjoyments — mere enjoyments, actually exists, and where it is combined with uniform firmness, and self-control, the parental authority reaches its highest pitch; and in fact is as great as can be needed for effecting any purposes that are really important. Apart from this persuasion of the prompt beneficence of parents, subordination may be perfect to the eye; but it is likely to be mechanical and bodily;—hearts are not in subjection.

It may seem to some readers useless, or even worse, to advert to those adventitious circumstances, favouring a domestic system of education, which it is scarcely, or perhaps not at all, in the power of parents to command. But I feel warranted in referring to some points of this sort, on the ground that, as the plan of home education is most likely to be adopted by those who are actually in the enjoyment of such advantages, whether by the gift of nature or fortune, it may be of some real service to direct their attention to the special means and prerogatives that are at their command, with a view

to the more diligent improvement of them. Who has not often grieved to see the choicest opportunities overlooked, or very imperfectly improved —a price put in the hand for the purchase of the rarest happiness, but no consciousness of the power it confers!

Now among such natural, and yet adventitious advantages, highly to be prized where possessed, is, first—a tranquil, yet ANIMATED FAMILY TEMPERAMENT, as distinguished from mere health, and which is equally removed, on the one hand, from sluggish immobility, or hebetude; and on the other, from a tremulous and flashing sensitiveness, or feverish excitability.

And here it is but candid to apprize the reader that not a few of the methods of culture which are to be specified in the following chapters would scarcely be found practicable in a family of so inert a constitution as that an active intellectual taste could not be excited among them. Nor again, would some of these methods (or any of them pursued to the fullest extent) be quite free from hazard in the case of children unusually sensitive and enthusiastic. But there is, in some families, an equable buoyancy of the animal spirits—a force at hand, convertible, in a moment, either to study or to play, which imparts freedom and zest, indifferently, to every sort of occupation, in doors and out of doors. This is the choice temperament for a family intended to be trained at home; and it will render every

method of improvement at once easy, delightful, and successful. More to be desired is such a tranquil vividness of the bodily and mental faculties, than are the rare and perilous endowments of genius. Certainly the system advanced in this volume, far from being of a sort that could be realised only among prodigies of intelligence, demands nothing more than the healthful alertness of mind of which we are speaking.

As to children immovably torpid, they had better be sent to school, where they will find the only sort of impulse to which the vis inertiæ of their minds is likely to yield. And on the other side, and notwithstanding the remonstrances of maternal tenderness, the same course probably should be pursued with children who are in a high degree morbidly sensitive; for the mere circumstance of living in a crowd—the withdrawment of the mind from itself, and the absence of petting, will tend to corroborate, as well the body as the mind.

We ought by no means to affirm wealth to be essential either to family happiness, or to intellectual advancement; for both may and do consist with the cares and restraints that attach to a bare competency; and if no ostentation is to be provided for, and no indulgences to be supported, less than an ample income will suffice for carrying into effect a happy, and even an elaborate system of home education. In truth

those very habits of privacy, and that adherence to rule and principle which are rendered necessary by a limited fortune, will be favourable, rather than otherwise, to the prosperous issue of such a system.

There is however a limit not to be passed: nor can it well be imagined that the minds and tastes of children can receive necessary attention in a home that is invaded by distracting cares, or is liable to privations such as divert the thoughts from intellectual pursuits, and render any regard to elegance a mockery. A family, keeping the culture of the mind prominently in view, ought to command, unconsciously, and without visible restraint, the ordinary comforts of life, and a measure too of its embellishments.

In fact, some of the methods recommended in the following chapters imply rather more than a scanty sufficiency of pecuniary means; and it will be obvious, as we proceed, that there are few processes of instruction which may not be advantageously extended or refined by the aids which an ample income supplies. And yet, true as this is, some signal instances ought not to be forgotten in which, by extraordinary energy on the part of parents who were contending from day to day with the severest adversity, and sustaining extreme privations, families, home taught, have received no mean degree of mental culture. But such instances are exceptive; and they imply, on the part of parents, a moral and an

intellectual greatness as rare almost as any qualities that illustrate human nature.

Again; I know not how to avoid affirming the peculiar desirableness of a COUNTRY RESIDENCE, as the scene of home education. I would indeed be very far from seeming to imply that domestic training may not be efficiently carried on by families that pass the year in the heart of cities, and that behold the fair face of nature only in a holiday week or month. Nevertheless this being granted, and every thing conceded too which can fairly be advanced on behalf of a city life, as abounding with means of improvement, and with various excitements, I must avow a very decided opinion in favour, on the whole, of a rural abode for a home-taught family. This idea, with all its delightful circumstances, is in fact always before me in describing, as well the habits of life, as the methods of instruction proper to home education. The picture in my view is that of an insulated country house, with its internal comfort and frugal elegance, its garden of sweets, and of gay, perennial enjoyments, its ample gravelled spaces for all purposes of homestead exercise and diversion; and its verdant silent vicinage of arable and pasture, of heath and hill, of woodland, and of river-side meadow. It is on such a spot, as I think, that the most desirable goods of life may the most easily be secured, and may be enjoyed with an unspent relish. It is there that love,

order, and intelligence, may keep company, apart from those factitious excitements which are followed by listlessness, and that are always demanding a something more intense; while the tastes formed in a country life have this characteristic, that, from year to year, they are satisfied with less and less excitement, and are more and more content with their proper objects.

It is in the country, and, as it seems to me, there only, that the minds of children may be kept in a state of healthful activity without a too frequent recurrence to books; and it is there best, if not exclusively, that a wide and copious acquaintance with the kingdoms of nature may be made by the means of ocular and conversational instruction, such as shall convey a fund of various information, apart from task-work and lesson-learning. A full half, or more, of all that ought to be learned in early life may be learned out of doors, by country-bred children; and how incalculable is the advantage of such a method, in respect both of the mind and of the body!

I am tempted to pursue this subject a little further, as well because a rural domestic economy is, by the most agreeable associations, connected in my own mind with the processes of education, as because I indulge the hope of actually inducing some parents, who may have it in their power to choose their own course, to transplant their young families from cities to the country, there to find (at the price, it is true, of certain specific

advantages) robust and rosy health, natural gaiety, purity of sentiment, and the invaluable habit of looking to the mind's own elasticity, day after day, for its happiness.

Let it be considered by those who may be balancing between a town and country life, as the fittest for carrying on home education, that, as it is the very purpose, as well as the prerogative, of this mode of culture to render the processes of instruction more elaborate, more intimate, and more intellectual, than those which are pursued in schools, there will be needed a proportionate counterpoise of animal exhilaration, to secure the well-being of the body, while the mind is brought into the fullest play. The fresh vigour of health must be so much the more cared for, as the mind is more deeply wrought upon, and as the sensibilities of the soul, and its more delicate emotions are cherished.

At school, the mechanical development of the mind by task-work, and the stimulants of the class, are well enough counterbalanced by the boisterous sports of the play-ground; and if the mind be overstrained for an hour or two, under the master's hand, it soon gets its collapse in the rude mirth that follows the outburst from the school door; and with this counteraction, if there be but a plentiful table, it is of small importance whether the air be a little more or less pure. The difference, in general health, between town and country SCHOOLS is perhaps not very re-

markable; but the difference in comparing town and country FAMILIES would, I think, make itself apparent in a striking manner.

Furthermore; I have stated the leading principle of home education to be—LATE DEVELOPMENT; but in relation to this very principle, a country life is peculiarly important, first, because it affords the most abundant and various means for keeping the mind in activity before the period arrives when the reasoning faculties are to be arduously exercised; and secondly, because a hardy, out-of-doors life becomes eminently desirable after the season of development has commenced, and this, not only, as I have already said, for securing the general health; but specifically for keeping alive that fresh and natural good sense which a merely studious and abstracted course always impairs, and often totally dissipates. The most powerful understandings are more or less enfeebled and perverted by a few years' seclusion in a closet, with a stove temperature, and lamp-light. There is needed more than a little rough, farmer-like, daily occupation abroad, to keep the *student* clear of the *pedant*; and assuredly it is not an hour's pacing up and down a college-walk that suffices for this purpose. In conducting a thoroughly intellectual education, one would fain counteract the debilitating effect of studious habits, so as should preclude the mortifying comparison commonly made between the accomplished scholar, and the

man of business, in whatever does not involve mere erudition. One would gladly spare a young man the pungent shame which many have felt—conscious as they may have been of high attainments, and yet compelled to own that, in the broad and open world, no one has thought their opinions worth listening to in relation to the weighty interests of common life. And in such instances, what is felt to be wanting, is not so much the requisite information on the point in question, as a want of that intuition which seizes a notion in the concrete—that is to say in its practical form; instead of groping about for it in the region of the abstract, where it has broken itself off from the actual concernments of mankind.

Again: I am really at a loss to know by what means, except those afforded so richly in a country life, the tastes and the imaginative sentiments, intimately connected as they are, as well with the moral as the rational faculties, may be formed and refined. In the country, the proper objects of these tastes stand every day before the eyes; and so the mind, in its plastic state, is cast into the mould of nature; and the genuine elements of poetic feeling, and of lofty sentiment, are wrought into the soul, instead of being taught as lessons. But in cities, the same objects, when occasionally presented, are looked at as if making up an exhibition:—they are seen for an hour, and pass away. ART and its wonders of imitation are what principally occupy the thoughts

and modify the tastes; these tastes therefore are, from the first, factitious, nor are they likely ever to become otherwise. In the country, and under judicious culture, although art and its imitations may in due time be learned and practised, it is nature that is intimately known and relished. The relative merits of nature and art, if such a phrase may be allowed, can hardly be understood except by those who have enjoyed long and delightful acquaintance with the former, before they came to know much of the latter.

And may it not be said that England (I do not mean exclusively of Scotland and Ireland) is the country, of all the world, in which rural life, taking the year round, is the most delightful, and best bears comparison, on the whole, with a town life; and in which, of course, home education may be carried on with the highest advantage? Surely there is not a country on behalf of which it could be pretended that it should be chosen rather than England, as the favoured home of rural enjoyment, graced by intelligence, and secured by firm domestic habits, and the quiet virtues.

The superiority of England, in this respect, might fairly be established by a mere reference to the fact (and I believe it is a fact) that in this country a larger proportion of those who are free to choose their place of abode and their mode of life, live remote from cities, than in any other country; for it seems a sound inference that the

land in which a country life is actually resorted to by a large proportion of those who can follow their own tastes (besides being the object of desire to multitudes who cannot do so) does really afford the means of rural enjoyment, in a higher degree than any other. The people of England, especially the moderately opulent, fly from towns and cities, not because the cities and towns of England are peculiarly undesirable, or are at all deficient in comfort; but because the COUNTRY is peculiarly attractive. As the notion of HOME is English, and the word is one which is hardly to be rendered into any other language, so does the term ordinarily carry with it the idea of the insulation, the independence, and the quiet delights of a country residence. It is quite true, for example, that the house of a bachelor may be called his home; nevertheless who ever hears the word without thinking of a family? And thus too, although a town house be a home, a country house is a home emphatically, or in the most genuine sense.

On this favourite subject I must yet claim the reader's indulgence awhile. As the term—HOME EDUCATION, brings with it, in my mind at least, the idea of rural life, so does the complex idea of sweet, tranquil, healthful enjoyment, varied, but not invaded, by the changing seasons, demand the scene to be laid in England, rather than in any other country of Europe, or of the world. — HOME EDUCATION then, taking the

phrase as carrying with it whatever can give it the highest possible advantage, is—The domestic system of an ENGLISH COUNTRY HOUSE.

Our climate, taking the year round, has been admitted to be more favourable to out-of-door occupations and pleasures than any other of Europe. It is in England, a few weeks excepted, that any one who is in health may pass, without fear, and without change of dress, from the drawing room or the study to the garden and the fields; and a family, not used to be foolishly cooped up in rough weather, may go abroad, and take their sports as many days, or nearly so, between October and April, as between April and October. This is a circumstance of incalculable advantage in relation to the practices of home education.

England too, and this is a recommendation by no means trivial in its bearing upon our immediate subject, is eminently the land of the picturesque. Although what is grand or romantic is confined to a few districts, what is deliciously beautiful, and that which invites the pencil, and feeds the taste, presents itself in every county. Few countries, if any in the world, are so thickly set with points of view, such as the landscape painter stops to notice; and those who would establish themselves in the rural mode, with a view to the health and enjoyments of a family, may take their course in almost any direction, and find spots where nothing which external

circumstances can supply will be wanting to secure the sweet felicity of a domestic country life.

It is in England, as matter of fact, more than in any other country of Europe, that a genuine taste for the beauties of nature has formed itself, so as to become a permanent and prominent feature of the national character. It is among ourselves that a keen relish for simple and natural pleasures, as distinguished from amusements and excitements, so prevails as to influence the national manners in all classes. But this is the very feeling—this preference of natural pleasures to excitements and dissipation, which it is incalculably important to cherish in the minds of young persons. Just so long as such a preference is decisive and paramount in the character every thing favourable may be hoped for:—the moment the tastes take the other turn, our means of influence are reduced almost to the lowest point; nor can we reckon any more upon successfully carrying forward either intellectual or moral culture. For these strong reasons therefore, England must be accounted the country in which home education may the best be put in practice; and the country where the modes of life it demands are already consonant with the settled habits and tastes of the largest and soundest portion of the people.

At the present time, by the diffusion of knowledge, and the facilities of intercourse, the

English yeoman and country gentleman have severally risen very far above the level occupied by their immediate predecessors. Good taste, better morals, and a liberal acquaintance with science, have taken the place of rude sensuality, and ignorance: and especially does the desire to secure a still better education for their children belong to the classes we are speaking of.

And is it not within the thousands of rural homes, adorning the road-sides of England—from the mansion of the noble, to the ornate cottage, and the comfortable farm house, that are to be found the virtues and graces of woman? As for those who can breathe only in the atmosphere of cities, who live for pleasure, whose home is abroad, and whose most serious business is amusement—these have no nationality; they form a class, found in all countries, and differing hardly by a shade, one from another. But if we are thinking of female excellence and loveliness, and if we turn, as we have reason to do, to England to find both united; it is to the COUNTRY we must look for our chosen specimens; it is among those who, whether as wives or daughters, not barely endure the seclusion of a country life, but enjoy it, enliven it, and make themselves there the loved dispensers of comfort and happiness to their circles.

There may be many whose early recollections being altogether of another sort, will not be ready to attach any such importance as the writer does,

to a country life, for a home-trained family. I have no wish to bring over to my own way of thinking on this subject those who entertain a contrary opinion; but I could not, with comfort to myself, advance in the prosecution of my task, without distinctly setting forth that idea of the externals of a happy home which is present to my own thoughts, and which is more or less involved in every method of instruction hereafter to be spoken of. I well know that many things of some importance must be foregone by living in the heart of the country; and it is very true that certain valuable means of improvement are only to be met with in cities; nevertheless I am compelled to regard all such advantages as of inferior consequence, if they are to be secured only by the relinquishment of the solid benefits above alluded to; and in fact the reader will perceive, throughout this work, that the writer has before him always—rural scenery, rural pastimes, rural tastes, and the ample spaces and the natural objects that surround a country home.

CHAPTER III.

FAMILY LOVE AND ORDER.

AGAIN I request the reader to bear in mind, that, if I advert in this volume to subjects properly belonging to moral and religious treatment, I do not profess either to advance the principles on which such treatment should rest, or to illustrate the application of them.

And yet something must be said with the view of setting before the reader that IDEA of the domestic system which is present to my own mind, and which I consider as inseparably connected with the processes and the exercises of intellectual culture. Fully to develop the mental faculties apart from family felicity—apart from pure enjoyments—apart from love, and subordination, is what I cannot so much as conceive of as practicable; nor is there an exercise so abstruse as that I can imagine it to be prosperously conducted by the stern and cold-hearted teacher of a depressed and reluctant learner.

The words LOVE and ORDER, although not synonymous, are absolutely inseparable in rela-

tion to the domestic system. At school, no doubt, there may be order, where there is little or no love; but it is frightful to think of a home of which the same might be said. And if in a family we must not look for order without love, so neither can love exist, or be preserved, without order; and by ORDER, I mean, ABSOLUTE GOVERNMENT, and PERFECT OBEDIENCE.

If there be not, in the natural dispositions of parents and children, enough kindly warmth of feeling to effect implicit obedience by the means of the gentle affections, and without frequent recurrence to measures of severity, home education had better not be attempted. Children may be governed at school by motives of fear, without entirely depraving their sentiments; because school is not their ALL; and they have still a home, and a sphere of love to think of. But to rule them in any such way at home itself, is to wind out of their hearts, by a slow but certain process, every root and fibre of the affections; nor will it fail to render them, in the end, murky, obdurate, crafty, selfish, and malign. In mere mercy let children be sent to school, who must be *schooled*, if kept at home.

It can hardly be necessary to say that this natural warmth of affection, which we name as requisite to the conduct of home education, is not that anxious sensitive fondness, existing chiefly on the parent's side, which, to be made any use of, must be perpetually talked of, and

pointed at, and adduced, in support of the trembling parental authority. What is wanted, is not a sentiment worn, and hackneyed, and fretted, until it has become little else than a confused feeling of suspicion, weariness, and distaste; it is not a spring that has no force, except when it is strained; or a fire that has neither sparks nor warmth, except so long as it is blown.

There is truth in the common observation, that parental affection is a much stronger feeling than the reciprocal affection of children toward their parents; and yet if it be so, we need not be disquieted so long as it is found to be also true, that, when parental love is sustained by energy and intelligence, it generates a sentiment in the bosoms of children strong enough to bear all the stress that ought to be laid upon it, and which we may securely confide in for carrying any measures of moral or intellectual discipline. Children, naturally affectionate, and who live always in the sunshine of a wise and vigorous parental love, will rarely, if ever, fail to render such a return of the devotion of their hearts as shall not merely make both parties happy, but such as shall support a firm domestic government, without any visible effort, or means of intimidation.

And let it be allowed to me to add, that, if a loving temper in parents and children be requisite for effecting the purposes of home education, hardly less can be affirmed of the conjugal affec-

tion. In a family not blessed with this first element of felicity, every difficulty of the domestic system of training is vastly enhanced, or is rendered insuperable. There can be no need to utter the truism, that the undisguised dissonance of parents is totally incompatible with methods of culture, and with a general course, such as we have now in view. But there is even a coldness and formality sometimes subsisting between husband and wife, which will too much chill the general temperature of the house, and take effect upon the dispositions of children, who will either become, in like manner, frigid and motionless; or attach themselves, with the pernicious feelings of partisans, to the one parent, or to the other. In relation to this subject we must repeat the aphorism, that, happiness is the first principle of home education.

There is, however, something more to be noted in relation to the influence of conjugal affection upon the dispositions and behaviour of children; for let it be remembered, and we are now speaking especially of the maternal authority, which it is so desirable to raise to the highest pitch, that, when conjugal love is warm and uniform, a mother stands invested, in the eyes of her children, with a power combining, with the direct radiance of her own gentle fondness, an indirect reverence of their father, who appears only to sustain the maternal rule. And it is a constant law of human nature, that complex sentiments,

such as the one here spoken of, possess far more force than belongs to the sum of the elements of which they are composed, when existing apart. For example; the feeling in the minds of children which secures their devoted obedience to a mother, who is seen to be sustained by a father's constant and cordial concurrence, far exceeds in practical efficacy the amount of regard separately paid to the authority of the father and the mother, when, from an unhappy want of affection, the two parents are always thought of by their children apart.

And here, may the hint be listened to that, among the reasons which may induce parents to adopt the practice of home education, this very motive might have its weight, that, if the prerequisites of conjugal affection already exist, namely, worth and purity of intention in both parties, the presence of children at home, and the need thence felt to arise of forbearance and tenderness, will powerfully tend to corroborate the feeling which is found to be so important, and to preserve it from shocks and disgusts. Those whose tempers are actually under the control of good sense and virtuous principles may often have occasion to rejoice in finding themselves borne along in the path of happiness, by subsidiary motives, when more direct sentiments happen to be in a languid state.

Moreover, it should not be forgotten, that young persons who, under the paternal roof,

have seen, and have lived in the sunshine of their parents' conjugal felicity, will be the more likely to secure it for themselves. It is true, that a judicious mother does not talk to her daughters of their own future matrimonial happiness; but without this it will be enough, if they see her every day, beloved and happy; for they will then, at least, be provided with a convincing contradiction of the immoral doctrine, that conjugal felicity is a romantic dream, never realized in common life. No opinion can be of more pernicious influence than this; and those parents must be accounted to have done much for their children, of both sexes, who, not by words, but in fact, have proved such a doctrine to be false.

There are however many degrees of affection, whether conjugal or parental; and it may be said, that, where other requisites are not wanting, the success of a system of domestic culture will bear proportion to the intensity of these feelings.

There is a parental affection, rational and steady, which may be quite sufficient to secure a consistent regard to the welfare of a family; and powerful enough to sustain the labours and self-denials involved in conducting an educational course. But there is an affection going very far beyond any such passive, measured love. There is a love of offspring that knows no restrictive reasons; that extends to any length of personal suffering or toil; a feeling of absolute self-

renunciation, whenever the interests of children involve a compromise of the comfort or tastes of the parent. There is a love of children in which self-love is drowned: a love, which, when combined with intelligence and firmness, sees through, and casts aside, every pretext of personal gratification, and steadily pursues the highest and most remote welfare of its object, with the determination at once of an animal instinct, and of a well-considered, rational purpose. There is a species of love, not liable to be worn by time, or slackened, as, from year to year, children become less and less dependent upon parental care: it is a feeling which possesses the energy of the most vehement passions, along with the calmness and appliancy of the gentlest affections; a feeling purged, as completely as any human sentiment can be, of the grossness of earth; and which seems to have been conferred upon human nature as a sample of emotions proper to a higher sphere.

This kind of parental love, balanced by vigorous good sense, clears all difficulties in education, and almost supersedes particular plans or advices. Whatever system may be adopted, in such a case, the routine of culture and instruction moves on with a noiseless and prosperous celerity; and especially so, if, to the warm affection which we are now supposing, and to the steady purpose and the tact which should guide it, there be added a certain natural delight in teaching, such as renders the labours of instruction pleasures, in fact.

On many occasions our tastes carry us forward with ease in the discharge of difficult duties, where higher principles might leave us flagging; and it is so especially in the business of education. To impart knowledge is, to some, an enjoyment that never tires. But this *teaching taste*, it must be confessed, is a gift of nature; nor is its place to be supplied, either by habit or by principle, except in an imperfect degree. Let then those who are conscious of being thus endowed, and whose warmth of heart and energy of understanding are sustained by a zest for tuition, let such be animated to improve and exert a talent that cannot fail to convey the very highest benefits, intellectual and moral, which one human being can receive from another.

An affectionate temperament, especially if it belong to both parents, is usually hereditary; and when so, the reciprocal sentiment supplies all that can be wished for in rendering a family happy, and the processes of culture prosperous. Or even if, in a numerous family, one may be found wanting in natural tenderness or sensibility, the influence of example, and the constant breathing of a kindly atmosphere, is likely, with skilful management of the individual temper, to supply, in good measure, what is lacking: thus the cold nature will grow warm amid the radiation of love from all sides; and if it never become fervent, will at least never congeal.

Yet warm-hearted parents will not forget that

the ascending love is, as we have said, less than the descending. The wide world, with its novelties, and the boundless mysterious futurity, exert an unspent influence over the minds of young persons, and cannot but divert a little their affections from their parents, however fondly and sincerely they may be loved. Whereas, with those who have reached the middle stage of life, the glitter of the world has been seen through, and its promise has been brought to the proof, and has so far failed in the performance, that the mind has turned toward the circle of the domestic affections, as a solace. But no such disabusing of the imagination by experience, has had place with children; and parents must remember that, while their own hopes and affections are converging more and more upon a focus, those of their children are all radiating through infinite space.

It may not be so easy to bear with equanimity another sort of disappointment, to which fond parental love is sometimes exposed;—I mean that which happens when, from a want of discretion, or of energy, the affections of children are snatched from those who claim them by the rights of nature, and are fixed upon by-standers or strangers. Yet it is a law of the human mind—inevitable and uniform, that it attaches itself, especially in early life, to the wisest, and the firmest, and the most consistently benign, of those who come daily within its circle.

A mother, for instance, may possess many substantial good qualities, which should attach her children to herself; and yet she may, in comparison with a teacher, or a relative, or even a servant, under the same roof, want tact, or calmness, or self-control, or dignity; and so in fact be loved only in an inferior degree. Nor will children be able, even if they entertained the wish to do so, to disguise their regards, or to speak and look as if they loved her most whom they love least. For this grief there is but one remedy, or preventive—the endeavour to become such as shall command, without asking for it, the unrivalled affection of children.

Beside the affection of which we have spoken, and beside the energy of mind which should be its counterpoise, and beside also the natural taste for teaching, there is a tact and address, not easily described, any more than easily acquired, which, in the daily and hourly government of children, and in rendering them happy, avails far more than all other qualities put together, apart from itself. Mothers or teachers may be seen, in every respect very poorly endowed with the knowledge or the principles, or with even the moral sentiments proper to the business of education, and yet unrivalled in the art of securing obedience, and of diffusing enjoyment, and of imparting so much knowledge as they profess to communicate.

It is difficult, except by naming its opposites,

to fix in words our conception of this desirable tact. We may say, if it be really needful to say so much, that it is not the product of any laboriously obtained knowledge of human nature, or of a scientific acquaintance with its principles. The happy management of human beings is no doubt in fact, always in harmony with the laws of the human mind; but this harmony is intuitively perceived, not learnedly acquired. Many a village dame plies the machinery of human nature well; but never has a professor of philosophy told those to whom nature has not granted this tact, either how to acquire it, or how to manage without it.

Parents may be found, in the highest degree solicitous for the welfare of their children, and not deficient in general intelligence, who nevertheless are perpetually struggling with domestic embarrassments, and sadly depressed by disappointment in the discharge of their daily duties. In such instances there may be observed, a something *too much* in the modes of treatment — too much talking and preaching, and a too frequent bringing in of ultimate motives, until the natural sensibility and delicacy of children's minds are, if the phrase may be allowed, worn threadbare; for all the gloss of the feelings is gone, and the warp and substance are going.

Such parents, for the sake of making assurance doubly sure, often lift the arm of authority, when the raising of the finger is more than

enough. An indiscreet anticipation of resistance never fails to suggest it. The simple law of the association of ideas is the immediate cause of a vastly larger amount of human actions than what springs from any formal resolution so to act. In all cases, therefore, the probability of compliance is much greater when nothing but compliance is expected, than when a thought of the contrary is, by some inauspicious word, or a mere look of doubt and anxiety, suggested. The great world of moral agency turns glibly upon its pivots, by the momentum of habit and the association of ideas: mischief attends the attempt to urge its onward force, by more motive or reason, in any instance, than is wanted.

If we were to attempt to divine the secret of a prosperous management of children, perhaps it would resolve itself into the simple fact of a quick perception of the train of their ideas, at any moment, and a facility in concurring with the stream of thought, whatever it may be, which, by the slightest guiding word or gesture, can be led into whatever channel may be desired.

The rule of management might then be condensed into the three words—discern, follow, and lead. That is to say, there is first the catching of the clue of thought in a child's mind; then the going on with the same train a little way: and, lastly, the giving it a new, though not opposite direction. By means of a governance

of the wandering minds of children in some such method as this, there is hardly any limit to the control which may be exercised over, as well their conduct, as their moral and intellectual habits. The same law of influence holds good even with adults, or at least with all but the most highly cultured and vigorous minds, which renounce this sort of control; and it is on this principle that the demagogue, or the religious orator, who is gifted with an intuition of human nature, leads and turns the minds of thousands, by the lifting of his finger.

But to return to our proper sphere—we may affirm that the government of minds is the easiest of all exercises, to whoever possesses the secret of influence, and is confident of success; but the most difficult, and the most vexatious, to those who attempt it on formal principles, such as may be laid down in so many rules fitted to occasions.

As the labours of instruction cannot be carried forward in a family except on the principle of spontaneous and perfect obedience, nor this obedience be ensured apart from warm and vigorous reciprocal sentiments of love between parents and children, so we may add is there needed, for the animation of the entire system, and for giving it ease and velocity of movement, a certain hilarity, and even playfulness, always saving decorum, on the part of parents and teachers, such as shall prevent, if we might so speak, the

minds of children from dragging on the ground.

If a mother preserves the gloss and brightness of her children's love by indulging them in playful caresses, so may a father render his authority the more intimate by holding it in reserve; while his ordinary manner toward his children is marked by vivacity, and a discreet sportiveness. It must, indeed, be thoroughly understood in the house that a father has, not only the power, but the resolution to enforce absolute submission to whatever he may command: — but it is enough if this be tacitly known; and the fact need very rarely be brought under notice. On the contrary, a father, immovably firm as he may be in maintaining his authority if disputed or resisted, is yet, in common, the leader and author of pleasures; and especially of such as are vivified by intelligence.

A father who has the species of talent requisite for the purpose, may with advantage, and especially at table, and in hours of relaxation—in the garden and the field, use a sportive style, and give indulgence, under the restraints of good taste, to facetious turns, sudden comparisons, and sprightly apologues. A chastened pleasantry of this sort serves many purposes, more or less important: — it graces and recommends the paternal authority; it gives rise to a state of mind intermediate between sport and study,

tending at once to connect the former with intelligence, and the latter with pleasurable sensations; it is a great means of quickening the sense of analogy, on which so much depends in all the higher mental processes; and it is an initiation in the vivid and elegant conversational manner that distinguishes good society.

A happy facetiousness on the part of parents or teachers, so far from rendering the ordinary style of conversation frivolous, on the contrary, in making the society of adults agreeable to children, gives them a distaste for that sheer inanity which is apt to prevail among themselves. Moreover, inasmuch as this sort of converse breaks up the feeling of formality, too often separating parents and children, it promotes directly that intimacy and ingenuousness whence a real friendship may at length result. What Lord Bacon says of pleasantry, in relation to the transaction of public business, is quite true also in education—Res est supra opinionem politica, facile transire a joco ad serium, a serio ad jocum.

That degree of regularity and exactitude in carrying forward the daily routine of studies and recreations, which is indispensable in a home-taught family, as well as in a school, is secured, in different families, by very different means; and the means actually employed, in any case, might be taken as an index of the height of the genuine feeling of affectionate reverence, prevailing in the minds of children. A prompt

regard to TIME and ORDER is that without which no solid improvement can be made;—on this point there can be no room for a question; but it remains to be asked, by what means this necessary observance of modes and seasons should be effected?

Now it will generally be found that, in families where the filial sentiment is infirm, and therefore variable, order, if maintained at all, is enforced by means of a hundred petty and vexatious formalities—by fines and penalties, and complicated regulations, the general tendency of which is to damp the hilarity of childhood, to stagnate the understanding, and to generate a habit of eye-service, and a regard to the letter more than to the spirit of law; from all which may easily spring a temper of mind incompatible alike with open-hearted simplicity of character, and with intellectual energy.

But where warm affection is the real spring of obedience, and where children are actually happy from day to day, an exact regard to times and to plans, or as much exactness in this respect as can be deemed useful, may be secured—no one sees by what immediate means; for the whole movement is spontaneous—the machine is a living one; and inasmuch as it is not a machine on a very large scale, the known will of the supreme power comes in the place of whatever is formal or rigorous. Along with the substantial advantages of regularity, there may therefore be enjoyed

a feeling of liberty and of individual spontaneousness, both of which are highly conducive to vigour of mind, and especially to a clearly expressed originality of personal character. Too much *law* breaks down all minds to a dull uniformity.

Stern punctuality in a family, effected by force of statutes and penalties, indicates, as I have said, a low temperature of the affections: for there must be a great want of feeling, if not of intelligence, where the preservation of order among seven or ten children, demands as much mechanism as is requisite in a school of a hundred. Let there be, as mere matter of convenience, the ringing of the bell at certain times; but the bell should not sound in the ears of children as a tocsin of dismay. The minute hand of the clock must be referred to, for guidance; but it should not, in the eyes of children, be invested with terrors, as if it were old Time's iron sceptre.

In the preceding chapter I stated my belief that the happy development of the higher intellectual faculties depends, in a very intimate manner, upon the joyousness of early life; and in this one we have spoken of family affection, and of the order thence resulting, as the means of family happiness; but if it would not lead us too far, something might be advanced concerning the influence of kindly affections upon the intellectual powers, in preserving their equipoise or sym-

metry. Let it however be observed, in passing, that, as the moral elements of our nature, upon the sound condition of which happiness or misery turns, are, or ought to be, paramount, so do they, when in a healthy state, impart an equable activity to the rational faculties. The affections have a reciprocity with the reason, and with the imagination, which indeed is often severed by unfavourable influences, but which, if cherished in early life, may always be enhanced.

Although we cannot command those rudiments of intellectual power which are the gift of nature, yet more than a little may be done, whatever be the rate of excellence originally put into our hands, in securing a vigorous development of the faculties—first, by merely promoting happiness; and then, more specifically, by cherishing the moral sentiments. It is these that keep the mind in a plastic, soluble state, so as to facilitate the process of culture: it is these that prevent such a fixedness and distortion of the mind as defies the skill of the teacher. When lassitude has come on from too long continued mental labours, or when, in the eager pursuit of particular intellectual objects, the mind has got a bent so strong as to render a return to other studies peculiarly difficult or unpleasing, there are two means of restoring at once its elasticity, and its equipoise; the one is the relaxation to be found in active amusements; and the other is the genial suffusion of *feeling* through the soul, by the

excitement of pure and tranquil emotions. Now, if the former be the means ordinarily to be resorted to, as always at hand, and always efficacious, we should hold the latter also at command, when a more thorough refreshment of the mental system is found to be needed.

And here I cannot avoid a passing reference to the fact, of the very happy influence of a due and fervent attendance upon religious exercises—public and private, in bringing the mind home to its resting and to its starting points, and in favouring its recovery of that clearness and freshness of perception, and of that well-poised self-control, and easy appliancy, which are lost in a course of severe application. I am prepared to affirm that, to the studious especially, and whether younger or older, A SUNDAY WELL SPENT—spent in happy exercises of the heart, devotional and domestic—a Sunday given to the SOUL, is the best of all means of refreshment for the mere intellect. A Sunday so passed, is a liquefaction of the entire nature—a process, dispelling mental cramps and stagnations, and enabling every single faculty again to get its due in the general diffusion of the intellectual power.

If this be true, and I have the firmest persuasion that it is so, the general inference it suggests is easily applied to the business of education; and the recollection of it will have its weight with parents in cherishing the religious and social affections among their children. It

is very certain that young persons may be shorn of their happiness, and may be chilled in their affections, and yet be made scholars, or mathematicians, or what else we please, in particular departments; but I deny that they can have the benefit of a vigorous development of the mind, as a whole, except in the sunshine of HAPPINESS, and of LOVE, and of PIETY.

CHAPTER IV.

THE THREE PERIODS OF EARLY LIFE—INFANCY.

IT is assumed then that a family, retained for education at home, is actually enjoying, in some good measure, what has been stated as indispensable to the prosperous conduct of a domestic system of culture.

But in preparation for putting such a system in movement, and especially as preliminary to what concerns the culture of the faculties in a natural order, it is necessary to distinguish, with some degree of precision, the several epochs of mental development, to each of which a specific treatment is proper: and whereas the classification effected at school has regard, not so much to the real expansion of the powers, as to the accidental readiness of children in performing certain exercises; on the contrary, at home, and inasmuch as a more correct adaptation of the processes of instruction to the capacity of the learner is intended, there is required a classification which, while it is altogether irrespective of mere clever-

ness, or promptitude in performing tasks, is founded upon the spontaneous evolution of the faculties, at certain periods of early life.

Although, at a first hearing, it may seem a solecism to speak of the *classification* of two, or three, or seven children, yet it is true, that the substantial benefits of classification, which consist in the treatment of each according to his capacities, are available with a few, as well as with many; and indeed with one alone. At school, nothing can well be taken account of, but a boy's ability to keep his standing in the performance of particular tasks; if he fails in a particle, he descends; if he excels but by ever so little, he rises; but it may often happen that the descending mind is really a more mature and a more vigorous one than the ascending, and might claim to be treated according to a higher method. Again, the broad yet unavoidable partition of a school into the two companies of the clever and the dull, seldom fails to bind up in the bundle of stupidity some who, although, from a certain peculiarity of their mental conformation, they may often be at fault when competing with minds more alert, want only a discriminating care to bring them out, and to aid them in evolving perhaps a rare talent, or a budding of genius.

But it is altogether another principle that is to govern the adaptation of the methods of culture to individual minds, at home. What a child can do, is not the question we have to ask; nor

how he can acquit himself in company with others; but rather this, what has nature done for him at this particular period, and what therefore is the specific aid which he now needs from his teacher?

When, as we are now about to do, we speak of infancy, childhood, and youth, as the three easily distinguishable and well-understood eras to which education applies, and when we say that infancy terminates with the sixth year, childhood in the eleventh or twelfth, and the period of adolescence in the seventeenth, it must not be forgotten that the characteristics of infancy sometimes disappear in the fourth year, and sometimes continue unchanged to the tenth; and that the season of childhood differs in its commencement and its close, often by as much as five years.

All that can, or need be done, is to form a tolerably exact conception of what it is which really characterises the several stages of early life; and then to look for these marks of progression, as they present themselves in each instance.

Infancy, the characteristics of which we are presently to attend to, is the period (the culture of the intellect being the object in view) during which the ANIMAL ORGANIZATION OF THE MIND is advancing more rapidly than at any other period of life. Infancy, therefore, is the season

in which every thing, so far as education is concerned, should be made subservient to the healthy growth and consolidation of the Brain. During infancy, whatever might irritate or disturb the nervous system, is utterly to be condemned and avoided.

Childhood, the second period of early life, embracing six years, or seven, is the time during which the brain, having nearly reached its organic perfection, and ceasing therefore to be in a peculiarly critical condition, the body—the muscular and osseous systems, and the digestive functions, expand, consolidate, and are, or ought to be corroborated. Nature therefore still demands that our first cares be directed to the welfare of the animal economy, and denies any such excitements to be addressed to the mind, as tend to disturb or retard the physical growth. Nevertheless the mind has now a remainder, or overplus of power at command, and may therefore be wrought upon with advantage, for there is at our disposal some power of attention, and some intellectual motive; and while, during this flowering season, the plant should be kept in the sunshine of enjoyment, an initiation may be made, such as shall render the after-course of study less difficult, by a degree of familiarity with the subjects it is to embrace.

As infancy is unconscious life, childhood is conscious life; and it is the season when the soul begins to recognise its individuality, and to

inquire concerning its own well-being: it is now therefore that its free cooperation in the process of culture may be secured, and reflex sentiments, springing from the experience of good and ill, may be brought into play, so as to enhance the mind's own power, and to put it on the course of self-control.

The third period of early life, not very aptly designated by any English word—for the word *youth*, beside that it is not with propriety comprehensive of both sexes, is at once an abstract and a concrete term, and is therefore open to an inconvenient ambiguity—this season of adolescence, commencing about the eleventh year, extends beyond the time when the direct control of parents and teachers merges in the mind's rational command of itself; and when authority and implicit obedience give place to persuasion, and moral influence. It is during this transition period, and while the authority of the teacher is in full force, and is yet conjoined with, and aided by the spontaneous energy of the pupil, that the arduous business of acquirement, in its various branches, and the strenuous processes of mental exercise, are to be carried on.

Youth is the season of restricted liberty, as well in a moral as an intellectual sense; that is to say, there is action and personal freedom within a defined space; and an alternate play is allowed to the feeling of individual responsibility, and to the feeling of implicit submission.

The mind is making its sallies upon the open ground of personal discretion; and is yet continually pulled in, and brought back within the circle where the superior intelligence and power of another are absolute; and this alternation peculiarly belongs to those who live under a home economy.

INFANCY.

Many practical inferences of great importance are involved in the one principle, that infancy is, in a peculiar sense, Nature's season;—or in other words, that it is the period during which very little need to be done except to exclude any foreign disturbance of the natural development of the animal and mental functions.

How much superfluous anxiety might be avoided, and how many ill-judged, and even mischievous endeavours to develop the mind might be saved, were this principle fully understood and assented to! Nor is this all; for what is really to be done by the mother for her infant, during its first five or six years, and which, as I have said, consists almost entirely in warding off causes of disturbance, and which is enough to employ her hands and thoughts, might be done much better than often it is, did she but confine her attention to it, exclusively of the fruitless and often pernicious labours which she imposes on herself.

It has already been observed that the happiness of children is not a something to be found for them, or created; but a something which they possess by the gift of nature, and in the enjoyment of which they are simply to be protected. In like manner we now say that, as the infant faculties are not our work, so neither is the expansion of them our task: Nature takes care of this nice operation, and has herself surrounded the new-born mind with the best excitements and means of exercise. What remains is only to see to it that no unfavourable and accidental influence comes in to spoil or to retard the process.

Those who are not contented with this humble part, and who would fain give some tangible proofs, at once of their zeal and of their ingenuity, may succeed in putting both beyond doubt; but not in doing better by art, what nature would have done well. Wonders may be achieved; but minds so treated are not substantially, or in a lasting manner benefited; and if some few ambitious teachers do surprise the world by what they can effect, very many, aiming to do the same without the peculiar talents requisite for the purpose, wear out themselves, and their little pupils, in a turmoil of perplexing exercises; and fret day after day, in the midst of a cumbrous apparatus of "means of development." Instead of all this, let us quietly observe what nature is about, and con-

centrate our cares and endeavours upon the single point of seeing that, while the animal system is consolidating, amid what are the well understood favourable circumstances—the vitality of the mind is preserved, by the gentlest and the most natural excitements. What we aim at is not to PRODUCE the mind; but just to ascertain, from day to day, that it is quick, and that it is in preparation to come forth in its destined season.

On the subject of infant training there has already taken place a return of the public mind to sounder principles; nor are the extravagances now often attempted, which were every where practised and applauded a few years ago. It was no wonder that, when first the attention of beneficent minds was directed to the art and science of education, as applicable especially to the lower ranks, and when it was discovered how much more might easily be effected than had heretofore ever been dreamed of, that the kind-hearted and ingenious promoters of these charitable enterprises, flushed with success, should have lost their hold of discretion.

But the paroxysm of educational philanthropy has subsided, and the substantial fruits of zeal and experience are being gathered. It is still however true that the misunderstood principles, and the hazardous practices which sprung out of the first heat of this zeal, and which, in all the

best-regulated schools, are meeting their correction, have, to some extent, pervaded the community, and have set wrong much relating to early treatment, in private families.

Zealous and intelligent mothers have been induced to copy at home what they have seen done, or attempted, in the infant school; and in adopting certain practices, the propriety of which, even in the infant school, might well have been questioned, have forgotten that the special reasons that might recommend or excuse such proceedings there, do not in any degree apply to a family.

In truth, if public and private education are found to differ widely when we come to compare the two systems as taking effect upon children who have attained their tenth year, they are, or ought to be, still more strikingly dissimilar as bearing upon an earlier period. The very objects aimed at in infant schools, and among the lowest class of a crowded population, are—many of them at least, the very things which should be put out of view in the treatment of a family.

No doubts ought to be insinuated as to the benefits likely to accrue from the infant-school system as now amended, and as applied to the wretched and neglected families of great towns. So employed, this system should be regarded altogether as a remedial economy, brought in for the relief of urgent misery: it is the doing the best possible under circumstances of a de-

plorable kind: it is a blessing from above, descending into an abyss of ignorance and destitution. The rule of the infant-school system is—To effect the greatest possible good, in the shortest possible time, and at the cheapest possible rate. And in carrying out this rule it is necessary to employ every device that may be suggested by a parsimonious ingenuity, and such as shall spread a shining atom of knowledge over a surface astonishingly large.

It is but equitable therefore to applaud those wonders of charity that are performed in well-managed infant schools; nor perhaps need we be very nice in our inquiries as to ultimate consequences, when the intelligence of ten or twelve years is thus developed at four or five. But assuredly the amazement felt in witnessing these exploits should not induce us, in returning home, where every circumstance, present and future, is totally different, to attempt a nursery imitation of the infant-school machinery.

Let it be granted that instances might be produced in which the pampered and fractious little crew of a carpeted and toy-stocked nursery would very poorly bear comparison, either as to intelligence or morals, with the children of an infant school; and that it might be much to their advantage to be handed over to pass without privilege through its discipline. All this may be true; nevertheless, what is actually wanted in a disorderly nursery, is not—the

infant-school system; though that were a benefit; but more of good sense, intelligence, and energy, on the part of the mother or governess.

We might go further, and grant that not a few home-taught children, trained even as we would have them trained, and in every respect wisely managed, might appear to disadvantage, if mixed in the ranks of an infant school; for they might seem less ready, less acute, and even less informed, than their equals in age about them. And what a triumph would it be to the promoters of "early development" to find children drawn from a family where all means of cultivation are at command, outdone and put to shame by the stocking-weaver's Willy and Kitty!

A mortification such as this, might very placidly be borne by parents who know what they are about, and who are carrying on intellectual culture as far as they think it should be carried, when an elaborate system of instruction is in prospect. With the children of the lower classes, if they can be snatched, by any means, from utter neglect, it is "now or never," in whatever relates either to their moral or intellectual training. To-morrow, those whom we are wishing to reclaim, may be torn from us, never again to come within the precincts of knowledge or virtue. But in our own families, what imaginable motive can there be for attempting this year, what we shall better be able to effect the

next? Under ordinary circumstances, the years of infancy are at our command, and so will be the years of childhood, when they come, and so the years of adolescence.

Moreover, it should be remembered, that the pernicious effects of a hurried and stimulating system of culture, as well upon the moral sentiments as the intellect, are likely to disappear in the case of children with whom the entire process of instruction is early brought to a close, and who, even if they may have sustained some mental or bodily injury, quickly lose every trace of it amid the toils of the factory or the field, where they too soon relapse into apathy and ignorance. Schooling completed at ten or twelve, the animal energy gets ahead of the mind, and as firm an insensibility is acquired as if there had been no infant-school development.

But with children of the upper classes, and who are to be fully educated, we can calculate upon no pause in the operation of mental culture; on the contrary, one process of excitement is immediately to succeed another; and each, as it comes, is to be more strenuous than that which it displaces: and then, and without an interval, the emulations, and the powerful influences of a college course, or of active life, are to follow, with their always increasing demands upon the resources of the body and the mind; and thus the latter is constantly kept in advance of the former.

It can hardly be necessary to use arguments in support of the general rule, that, in proportion as an intended system of mental culture is protracted, its commencement should be lenient; and that, in such cases, the spontaneous expansion of the faculties should be waited for, rather than hurried on, and that, looking to the remote issue of our endeavours, the original stock of intellectual power should be husbanded, more than employed. It should be deemed that enough is done if a healthful vivacity of mind is preserved, in readiness for the season of actual labour.

The general question concerning the desirableness of early excitement, or the contrary, might be argued on the ground of three probable suppositions; and the practical conclusion we must come to, will I think be the same in each. In the first place then, let it be supposed that a child exhibits extraordinary intelligence, and manifests an eager and unusual desire for knowledge; and let it further be assumed that this early manifestation of mind is exempt from all suspicion of its arising from a dangerous activity of the brain; but that, on the contrary, the bodily and mental constitution is thoroughly sound. Now in this case, if we put aside the foolish ambition of showing off a prodigy of erudition, at seven years, there remains no motive whatever, such as should impel a parent to hasten that culture which, without a shadow of doubt, will proceed rapidly enough, whenever it may be

seriously commenced. Taking due care that the tastes be not thwarted, and that the mind be not broken with restraints, why should we not secure for the bodily system a long morning of animal tranquillity, and gay sunshine? Why not allow the eager spirit a long familiarity with Nature's self, before the time when Learning—her interpreter, comes in to be the chief speaker?

But, to take the second supposition, if in any case there be reason to fear—and when is there not some reason to fear? that precocious intelligence is the ominous symptom of a morbid temperament; then, assuredly, one course only ought to be pursued; for if there be at all a chance for the preservation of the life and the intellect, in such cases, it turns entirely upon our holding education in abeyance, and upon the removal of every mental excitement. What indulgence so cruel as that of feeding without restraint the ravenous mind, whose appetite for knowledge is a prognostic of death!

Or let us, in the third place, suppose the opposite case, of an original defect of intelligence; then we may be sure that, either the torture we inflict upon both teacher and pupil by a too early and a forced system of instruction, will be totally fruitless; or that it will generate such a distaste of all learning as to accumulate insurmountable difficulties upon the future path, when necessary acquirements are to be made. Besides, we should always keep in view the possible case

of some rare faculties being concealed beneath the appearance of infant stupidity, and which may be permanently injured by a forced development: such a mind watched over and cherished, will not fail to take up its own education in due time.

But in the instance of children of ordinary intelligence, our alternative is by no means that of rendering them book-learned in infancy, or of leaving them to reach childhood in a vacant and uninformed mental condition. This is now much better understood than once it was; and yet the practical inference is not always consistently carried into effect, even in the best managed families.

Not a syllable of book-learning need have been acquired, and scarcely a task learned, and yet the mind of a child, in its fifth year, may be not merely in a state of the happiest moral activity, but may be intellectually alive, and actually enriched too by various information, concerning the visible universe; and may have made acquaintance with whatever presents itself under a pleasurable aspect—and assuredly nothing but what is agreeable should at all be presented to the infant mind:—this rule excludes not merely objects or ideas positively unpleasing, but all such as are dry, and devoid of attractions.

In the flower-garden, and among the gay, winged, humming tribes that frequent it, Nature opens her school;—we have but to lead our infant charge thither, and simply to act as her

interpreters; and when this pictured alphabet has been learned, it will be easy to go afield, and thence to mount higher and higher, until we tread the skies, and make some acquaintance with distant worlds. None but the most dronish teachers can need to be told that the exacting of volumes of lessons, may entirely fail of quickening the mind. There may, however, be many who, from the conscious or supposed want in themselves of various information, and of the requisite fertility of thought, adhere to the stultifying practice of lesson-giving, although they perceive its inutility, and would gladly, if not at too great a cost of exertion, adopt a different method.

Hints, intended to facilitate such a better purpose, will hereafter be suggested; at present I would offer some considerations which may serve to confirm the minds of parents in the resolution not to allow more than a very little book-learning to be attempted during the first period of education.

It is not so much the actual process of learning to read, as the consequences of being able to read, during early years, which are to be guarded against; and this period, be it remembered, extends to the time when the organization of the brain is complete, and when its ultimate dimensions are nearly attained. In learning to read, if the process be conducted with a fair degree of discretion, the mind is not taxed by the demand of continuous attention; on the contrary,

its frequent stops and trips, and the consequent interposition of the teacher, break up the exercise into morsels, and afford respites and *turns-off* to the brain. Moreover, before that habit of the eye and ear is perfectly formed, which enables an adult to read without a thought of the combination of letters in words, the mind is still occupied with the visible symbols, on the page; nor does the mental operation essentially differ from that which is every hour going on, while the names of familiar objects are becoming associated with them in the memory.

The only injury likely to accrue from the mere operation of learning to read, is that which happens when the exercise, each time, is continued a little too long, so as to impair the animal vivacity. But the mental process becomes altogether of another sort when a good degree of proficiency has been made; for, from that time, and until the connexion between written words and the ideas they stand for has become so familiarly perceived, as that the mind is no longer conscious of any act in passing from the one to the other—until that time, there is an ill-adjusted movement going on in the brain, of a kind always more or less hurtful.

This circumstance deserves to be better understood and more considered than it usually is. Let it be observed then that the mind, or the brain, and it is of no importance here to inquire which, is, in every instance, perturbed, and exposed to

injury, when two operations, linked one with the other, are going on, but which do not accurately keep time, or advance precisely at the same rate. It is hence that most cases of confusion of the thoughts arise; and an attention to the simple fact might, in very many instances, greatly aid those who, in the transaction of complicated affairs, are liable to lose the ready command of their faculties.

Instances of the sort are easily named, such as when an unpractised writer is labouring to keep pace with a speaker; or when a clerk, less expert, is collecting accounts in company with one more so; or when a performer in a concert is embarrassed between the rival claims of the ear, the eye, and the fingers, in executing a part not familiar to him: or, to name an instance precisely in point, when an adult has made just that degree of acquaintance with a new language which exempts him from the necessity of incessantly breaking off from his book to consult his lexicon; so that he pursues, or endeavours to pursue, the sense of the writer at the ordinary pace at which the eye traverses a printed page. In this case, he finds that the rate of progress to which the eye is habituated, and which it does not readily slacken, greatly exceeds that at which the mind can get through the complicated process of recollecting the meaning of single words, and of analyzing the construction of sentences. There is therefore a perpetual jar—a want of syn-

chronous movement, and a sense of distress, and a strain, which quickly exhaust the power of attention; or, if persisted in, impair the brain.

Those who have made acquirements later than in youth, will remember to have found the second stage of their familiarity with a new language more trying to the mind than the first; or, in other words, they will have been able to spend some hours, with less bodily and mental damage, in conning a book, word by word, in a language barely understood, than in attempting to read off an author of whose language they have deemed themselves nearly masters. In reading word by word, the several mental operations are held to time by the mere interruption; but in reading paragraphs continuously, the eye outstrips the memory, and the mind is wrenched.

Now a child, just after he has become so far familiar with written language as to be able to enunciate sentences without hesitation, is yet far from having acquired an instantaneous recollection—perhaps no knowledge at all, of a large proportion of the words he meets with; and especially as they are artificially collocated in books. The habit of the eye, and of the voice, is therefore hurrying him on much faster than the mind can follow,; and he either abandons altogether the attempt mentally to accompany his own voice, or he suffers harm. And it is manifest that, while children of little or no intelligence, will, by adopting the former expedient,

escape uninjured; those whose curiosity is keen, will not be content with any such vapid practice, and are therefore liable to so much the more damage.

And in another way it is intelligent children who suffer the most from much reading; for, while they shun the nursery nonsense, the cock-robin inanities, that amuse their inferiors, and are always seeking for books a step or two above their comprehension, the stress of the mind is increased. Books of the highest class, totally unintelligible to them, would be less injurious than are such as they usually crave and devour. But when the same book is read to an intelligent child, at a moderate rate, the mind, far more familiar with words by the ear than by the eye, catches the meaning of sentences rapidly enough to prevent the jar between the exterior and interior faculties.

Nevertheless, this ill consequence of much reading, during the period of infancy, is of a kind to wear away by mere habit, and by a constantly extending familiarity with the meaning of words. But it is not so with another injurious effect of reading, which affects the animal system in all its functions; and though little thought of, is, as I have no doubt, a frequent cause of general infirmity of health, and of serious diseases of the sensorium.

Adults utterly forget the physical sensations of early life, even if they were distinctly regarded

at the time; nor are there any means of ascertaining some very important facts, which the habits of adolescence obliterate, except a very careful observation of children, guided by specific information. Few persons conversant with children, can have failed to notice the pallid visage, the lowered pulse, and the dyspeptic look, or actual nausea, which are produced by reading, and especially when a child reads to himself. These appearances we are used to attribute in a loose manner, to too much study; and we are satisfied in finding that the complexion and the appetite presently return upon the play-ground. But in fact the injury, although the immediate symptoms may quickly disappear, is always more or less permanent, and if often repeated, debilitates the system. Let any one try the easy experiment of drawing a dotted line three or four inches in length upon a blank page, marking the extremities with a cross, and then let him fifty times consecutively, traverse this line with the eye from end to end. There are few brains, I believe, of so firm a texture as not to find fifty repetitions of this journey of the eye more than enough to produce a very disagreeable sensation of giddiness; for not merely does the eye-ball ache, but the head swims; and the effect of such an oscillation of the sight is nearly the same as is produced by the motion of a ship.

What prevents our being conscious, in this way, of the perpetually retorted movement of the

eye, in ordinary reading, is the mind's engagement with the subject; and in proportion as the subject engrosses the attention, the physical consequences of the movement disappear. It is on this same principle that some vivid excitement, taking place on ship-board, dissipates for the time, the sickness of almost the feeblest stomachs; the stronger class of sensations overcoming the weaker. Mere habit also effects for the adult reader, what it does for the sailor, rendering both unconscious of what would otherwise disturb the head and stomach. Yet this uneasy sensation may be revived, either in the way that has just been mentioned; or by reading page after page of a language unknown, and which therefore does not engage the mind.

But inasmuch as the language of books is imperfectly understood by a child, and awakens little emotion, the mechanical influence of the operation of reading takes its full effect upon the brain; and although it does not actually produce sickness, it does, almost invariably, enfeeble the circulation, and derange the digestive organs; nor is there any kind of application which so certainly debilitates the animal functions of a child as reading does; and although the traces of the injury sustained at any one time are quickly obliterated by active sports, it is an error to suppose that the constitution retains no permanent damage. I am inclined to think that the comparative delicacy of muscular texture, and the dyspepsia,

which so commonly attach to children whose minds are much elicited, is attributable more to the mere practice of reading, than to any one other circumstance whatsoever, or to all others put together. At least it is certain that the ruddy vigour of high health will almost always be found in inverse proportion to the hours in the day during which a child has a book before his eyes.

Little caution need be used in this respect with children of active dispositions, who do not soon forfeit their roses by too much study; but there are those who no sooner taste the sweets of reading, and become conscious of the pleasures of intellectual gormandizing, than they give themselves to it, if allowed, incessantly; nor do they fail to exhibit the effects of what is nothing else than a perpetual mental intoxication. Reading without intelligence injures the brain and stomach mechanically: reading with intelligence injures both, in the less direct manner of nervous excitement; but either way, much reading and robust health are incompatible.

Only let a child, eager for knowledge, be read to, instead of allowing him to read to himself, and the whole of the mechanical mischief is avoided:—and again, let him be freely conversed with in a desultory manner, in the midst of active engagements, and out of doors; and then, while an equal amount of information is conveyed, and in a form more readily assimilated by the

mind, nearly all the mischiefs of excitement, as springing from study, are also avoided. In a word, let books in the hand, except as playthings, be, as much as possible, held back during the early period of education; and the later the time at which they are freely allowed the better.

If it were not true that, notwithstanding the improved notions now prevalent, relative to early tasking and lesson-learning, there is always a probability that perfunctory teachers will adhere to the reprobated practice, I should not think it necessary to dwell upon the subject. It is however absolutely necessary that parents who avail themselves of the services of a governess or tutor, as most must do, should have a strong conviction of the injurious consequences attending the method of gorging children, and especially young children, with the verbiage of tasks. Unfortunately, nothing can supply the place of task-work in teaching, but the elastic intelligence of the teacher's own mind; and those who possess no such spring of movement, will always, if allowed to do it, swamp the understandings of children in lessons.

The committing of VERSE to memory is, as I shall have occasion again to say, a facile and altogether unexceptionable exercise of that faculty; and a ready means of fixing the best sentiments in the mind, in connexion with pleasurable emotions; and this mental association is perhaps the most important of any which it is the object of educa-

tion to form. But I am inclined to doubt if a balance of good is in any case secured by the practice of loading the memory with PROSE, of any kind, and especially with such prose as the rules and rudiments of the sciences, or of grammar, all which may be taught far more effectively in another manner. As a means of learning any thing which it is intended that the understanding should grasp, the consigning a prose task to the memory does all that can be done to defeat the end which we ought to have in view; for the organic process of reverting, in quick alternation, from the page to the brain, from the brain to the page, in learning a task, is nothing but a lulling dose to the mind; and if long continued, renders the conceptive faculty and the reason absolutely torpid. Nothing is left in a child's mind, after a while, but the see-saw habit, on the perfection of which he knows he must depend for his power of going through with a faultless repetition of his task. And if the faultlessness of the repetition be exacted by the teacher with any rigour, so as to produce some anxiety while learning, the process is enough to stupify the most vigorous understanding; and as to the dull, it excludes every hope of vivification, and fixes them in a vacant lethargy, never afterwards to be dispelled.

Let any one watch the countenances of a row of children repeating the rules of grammar, or the abstruse definitions of artificial geography,

or any such gibberish, which an indolently laborious teacher may have enjoined. Let him turn his eye, first toward the least intelligent of the class, and he will perceive that these, as they have made no attempt whatever to attach a meaning to the words and sentences they are repeating, and on the contrary have concentrated their attention upon the mere series of sounds, so that the entire process is purely organic—these will, for the most part, acquit themselves with alacrity, and obtain the approving smile of the kindred spirit that presides over the performance. But alas for those who, under such a teacher, and subjected to such a process, possess some intelligence, and have not as yet learnt to quash it! While passing through the terrors of repetition, the agitated and flushed faces of children of this sort, indicate the distressing to-and-fro movement of the faculties: —while learning their rôle, they have instinctively endeavoured to connect ideas with the words of the lesson; and not having the benefit of intelligent guidance in doing so, have probably perplexed themselves beyond all hope of extrication, among the crabbed barbarisms of their task:—besides, they are now compelled to have recourse to their recollection of mere sounds, and thus are doubly embarrassed between memory and reason, between sounds and ideas; and meantime are scared by the harsh rebukes of their undiscriminating teacher. Through the fine transparent countenance, glowing with fear

and shame, and which might so easily have been made to sparkle with the free interchange of a congenial intelligence—through the countenance, you may look into the very organ of thought, and discern the curdling of the brain under this species of torture. Now, the harassed mind snatches at the mere sounds of the lesson; and now again endeavours to catch the rational clue of its ideas; until at length it becomes totally bewildered.

Intelligent children, so unfortunate as to come under a treatment of this sort, if not at length broken down and stultified, learn, after a while, to rid themselves fairly of their understandings whenever they have to do with their teacher, and get the habit of regarding school hours as so much time spent in the dark. They have found that, in school, THOUGHT, if not punishable, is a contraband commodity, and therefore they keep it in their sleeve. Common minded children could lose nothing if their tasks were given them in Chaldee; while by this means intelligent children would be exempted from a serious disadvantage, inasmuch as reason and memory would no longer be set together on the rack.

There is however an opposite error; and children, during the early period of which we are now speaking, may suffer in an equal degree by a mistaken endeavour to be "very rational, and very philosophical," in whatever is said and done

with, and for them. The true philosophy of early treatment is to remember that children are not philosophers, nor capable of being made such. A teacher's own intelligence is to be employed tacitly, for the benefit of children; not to be let fall upon them in mass: it is to come down like the dew; not to descend as a water-spout. Need it be said that early childhood knows little of abstractions, and nothing of the complicated abstractions involved in reasoning?

A broad and important distinction is to be observed, in dealing with young children, between their being REASONABLE, and their being able to REASON. These things, totally unlike as they are, except in the mere sound of the words, may easily be confounded, and the one be put in the place of the other. A child, in its third year, or even earlier, may, by proper treatment, be rendered thoroughly reasonable; but it is not until years afterwards that any mental process, such as ought to be called reasoning, should be attempted with him. Many an acute and sound reasoner of adult age is in fact far less reasonable, in his general conduct, than a well-trained child of eight years.

Children, it is true, may be talked with in an illative style; and they may be dragged along, from inference to conclusions, and may be made to lisp the *ergos* of logic; but there is nothing of reality in all this; and if they are examined in an inartificial manner, on the points of the

argument which they have seemed to follow, it will be found that they have failed entirely to grasp the dependence of ideas.

A child is reasonable who, in consequence of the pains bestowed upon him (for few or none are reasonable spontaneously) has learned to entertain a second or modifying motive, along with the first that suggests itself to him; and who actually holds an involuntary motive in abeyance, while he yields to that which is better but not so imperative. To be reasonable, is to be governed by a disposition which inclines one to listen to considerations opposed to the impetus of appetite, selfishness, vanity, pride, resentment: —it is to retain, amid the hurry of personal desires, a recollection of the wishes, the will, the comfort, the affection, of others, whether they be present or absent: —it is to have the habit of keeping the future in view, while the present importunately presses itself upon attention. But this sort of reasonableness the indispensable condition of moral discipline and domestic government, totally differs from the power of following the abstruse relations or dependencies of things; or, as it is called, of reasoning, which demands always an effort of abstraction, and a power of combining series of inferences. A child, much more reasonable in fact than many a philosopher, must be a prodigy of intelligence if he really traces and grasps more than one inference at a time, and that of the most palpable kind.

Some little preliminary exercises, or rather play of the reasoning faculty, may, if the teacher pleases, be attempted at an early age; but the inferential process should relate to things that can actually be spread out before the eye; as when the simpler operations of arithmetic are exhibited by the means of counters. In fact however, it is not seldom attempted to force into a child's mind the most crabbed of all abstractions—those for example of grammar, or of artificial geography and astronomy, in teaching what is called —"the use of the globes." A teacher who might deem it a too familiar employment for himself, and a too knotty point for a child—to explain why and how a pump raises water from a well; or why a weight, borne on a pole between two should be placed in the middle; or how a paper kite is sustained in the air, will be seen hammering the reason of a rule of syntax, or labouring to explain the precession of the equinoxes, or the means that have been employed for adjusting the calendar.

While spending their own strength, and wasting or breaking down that of their pupils, by striving to call out the faculty of abstraction and ratiocination, five years before its time, teachers are fond of justifying their ill-judged assiduity by saying—"only make children understand the *reason* of the rule that is given them, and thenceforward all will be easy." This maxim may be sound enough in itself; but the question returns

—At what age should such explanations be attempted in relation to each branch of knowledge? Something of the sort may be done in conveying the rudiments of mechanics, or of astronomy, long before it should be thought of in relation to subjects purely intellectual.

Yet, even in relation to the very simplest and most palpable mechanical principles, and in the case of children decidedly intelligent, I have seen reason to doubt whether a particle of advantage is really gained by endeavouring to make them syllogize, or reach conclusions, before the mind has acquired any degree of grasping force. We often totally deceive ourselves, when we think a child has followed us in the explanation we have been giving of some abstract relation, or dependency of cause and effect. Let him be asked to give his own statement of this same chain of inferences; and it will probably appear that it has been the concrete, not the abstract he has seized; or perhaps he has rested in some accidental and whimsical sense of the phrases we have used. A little girl is told that—a verb is a word that signifies to be, to do, or to suffer; and that a verb of the first sort is called neuter, of the second active, and of the third passive, as—I am—I teach—You are taught. "Oh yes, mamma, I understand that very well; for I know it costs you much trouble to teach me, and unless you were of a very *active* disposition I am sure you would not be able to do it; and then

I am often very tired, and have the head-ache when you have been teaching me; and so I *suffer*, when I am taught, and therefore being taught, is a passive verb :—all this about verbs is very plain."

An intelligent teacher, if, during the early period of education, he aims at all to elicit the abstractive and reasoning faculty (which there is no motive for doing) will at least observe the distinction between presenting such conclusions as are mere statements of known facts, and such as involve a train of inferences, and which must be seen in their dependence, from the first link to the last, as for example—If the see-saw be evenly balanced, and you get upon one end of it, what happens ?—*My* end comes to the ground, and the other mounts aloft.—Yes, unless there be some one of equal weight at that end, and then ?—It balances. But if you slip off when your end touches the ground, what then ? Whoever is at the other end will descend with a jerk, and perhaps will be hurt.—Well then, remember never again to jump off, as you did yesterday, unless your companion is prepared to do so at the same time.

This is at once understood, because the inference, with its practical conclusion, is itself only the statement of a fact as familiarly known as the premises, and in experience, the premises and the conclusion are actually conjoined. But if we were to ask the same child to give the reason, or

were ourselves to state it, why, when one sits nearer to the fulcrum than the other, he can no longer counterpoise his antagonist; or why boys of unequal weight may balance each other by placing themselves at proportionate distances from the centre of oscillation, the explanation, in this case, involves the doctrine of the compensations of space and time, or the principle of the lever; and it is a chance if the most expert teacher will succeed in rendering any such abstruse principle really intelligible to a child of the age we are now supposing. This at least is certain, that the comprehension of it will have demanded an effort too great for the unripe brain; it will have occupied time that might have been better employed; and will, in less than an hour, have flown, leaving nothing in the mind but a jumble of crabbed phrases and puzzling diagrams. If a child strives to understand a complicated statement, but fails in his endeavours, his faculties have been perturbed; if he does understand it by extraordinary intelligence, a rare power, in the bud, has been forced, which, without a doubt, would have expanded, and blossomed, and fructified in due season: what motive can justify the violence we have been doing to nature?

Happily, and by the beneficial constitution of the human system, animal and mental, the mischief done, at any one time, by a too ambitious teacher, may in great measure be remedied by half an hour's high sport.—Play disperses the

dose of logic, and all is right again. This corrective effect of the active gaiety of children, will, in most instances, render the over zeal of a teacher harmless; but it is certain that a brain of fine and rare organization, eager for knowledge, may be permanently injured by such treatment. A mind, thus early curdled by injudicious zeal, might be compared to a marbled paper—in the old fashion, the bright colours of which, streaked into fantastic forms, might, if they had been reserved for the pencil of the master, have pictured the beauty of the real world.

In adherence to the general principle which, as I think, should distinguish the slow but comprehensive culture to be pursued at home, from the hurried development, necessarily aimed at where education is to be imparted at a cheap rate, and to large numbers—in adherence to this leading principle, I should lightly esteem, if not entirely reject, various ingenious devices—the philosophical pastimes, and games of science, which have indeed a show of utility, or perhaps a little more, when resorted to under the circumstances that attach to frugal education. But children who enjoy ample spaces, and means of amusement, and who are out of doors, and at liberty four or five hours of the day, as they ought, do not need to be amused also, during the few hours in which they are receiving instruction.

Besides that such devices will seem very poor pleasure to those whose pleasures, properly so

called, are of the most exhilarating sort. If considered as means of learning, these devices are circuitous, cumbrous, and fantastic; and tend rather to distract the understanding than to aid it. A vivacious and intelligent teacher finds no difficulty in conveying the elements of geography, astronomy, and even arithmetic, in a form such as children will attend to with eagerness; and this without the gilding that is contrived with the view of cheating the young mind into knowledge, as babies are beguiled to swallow medicine.

Much has been said of late, of certain "exercises of the senses," concerning the utility of which I will give no opinion, when brought to bear upon children in infant and parochial schools. In such places it may be well to provoke the sluggish perceptions, as well as to stimulate the dormant reason, by all possible means. But I really do not know what it is that remains to be desired, in regard to the ordinary purposes of life, if the body be sound, and in high health, and the mind be alert. It is to the savage, or it is to men exercising special callings of an inferior sort, that there can be much benefit in having the senses sharpened to an extreme acuteness. A sight like the vulture's, or a power of hearing footsteps half a mile distant; or a sense of feeling such as may serve a man if he grows blind, or a nicety of smell and taste fitting him to be chief in a French

kitchen—accomplishments such as these, important as they may be to those who are destined to practise handicrafts, or to "shift for themselves" in the "back woods," can be of little value to those who are to take their position in society on the higher ground of their intellectual and moral qualities. In truth, it may be questioned whether a gentleman might not really wish himself wanting in such a legerdemain perfection of the senses, as would be likely to suggest to others the belief that he had passed his childhood under the tuition of a gang of gypsies.

There are, however, certain exercises of the senses which, in a manner that has not been duly regarded, tend to give activity and precision to the faculty of abstraction; and of these I shall speak particularly on a future occasion. For the rest, that is to say, whatever reaches its end in the bodily perceptions, I think we can go but a very little way without so giving the mind a bent toward the lower faculties, as must divert it from the exercise of the higher. A man may be a proficient in active sports, and gentlemanly gymnastics, compatibly with elegance and elevation of mind; but it is another thing, so to send the soul outward toward its perceptive consciousness as to imbue it with the organic sensitiveness of the lynx, the hare, or the spider.

It is readily granted that, if a child appear to be by conformation defective in any one of his perceptions, artificial means should be resorted to

for remedying, as far as possible, the inconvenience thence arising: and it may be well also, on the other hand, to bestow a peculiar training upon any natural faculty, which may seem a special endowment, intended to constitute the distinction of the individual. But in general, active sports, with music and drawing, will be found to afford all the training of the senses which we need care for.

During early childhood enough is done—every thing (in relation to intellectual culture) which should be thought of, if MENTAL VIVACITY be maintained. Far more safe is it to stop at this point, than to attempt any development of the reason; and far more useful too, if we look to the future, than the conveyance of any amount of knowledge that may be imparted at the cost of a child's animal hilarity. If the mind be quick—if a child reaches the second period of life apt to learn, even if he knows little or nothing, a wise parent may be content.

Intellectual vitality, as distinguished from a precocious development of reason, and from specific acquirements, results in a spontaneous manner from converse with those who themselves possess it. Vivid intellectuality is an emanation, absorbed unconsciously by all coming within its circle. An intelligent mother, for instance, if she will but trust to the unthought-of radiation of her own mind, without deeming it incumbent

upon her to reduce this influence, and to abate it, under the form of set exercises, and processes of instruction, will rarely fail to have the satisfaction of handing her children over, in their ninth and tenth year, to those who are to commence a more defined course of training, in a state really the best for deriving advantage from it.

The sparkling flow of desultory intercourse, which, while it is little more than prattle on the one side, is, on the other, a pointed, playful, but well aimed rejoinder—having its ulterior purpose, though unperceived; such a style of converse involves, as I think, nearly all the education which young children need receive. A prompt and concise reply to every question, and a leading on, in each instance, a little farther, but not far, will enable a mother not only to make herself sought after, and courted, as the most agreeable companion her children can find, but to convey, no one can tell how, or when, so much knowledge of what is afterwards to be systematically learned, as shall serve to remove all the ruggedness from the entrance to the temple of learning.

In this mode an adroit teacher contrives, as if it were incidentally, to lift the corners of the curtain of Philosophy, to awaken the zest of children, and to give them some familiarity with things and terms, without taxing their attention, in any case, five minutes at a time, or loading their memories with a single technical term.

But it must be confessed that a teacher who pursues a method such as this, will have less leisure for herself, than one who imposes stated tasks upon her pupils; for she will never be able to say--her work is done, while her charge are up and about. The indolent, therefore, will choose rather to condense all they have to do into a two or three hours' schooling, and then be free. On the other hand an ambitious teacher does not readily consent to relinquish the triumph of an exhibition of the incredible proficiency of her pupils in getting through task-work: but a mother, we presume, has at once the energy and the self-denial demanded by the very different course we have been speaking of.

As to schooling, with its stated hours for application and sitting still, it is no doubt highly useful, as a means of filling up the day, so as may give a zest to every moment of it. But there is enough in the purely mechanical parts of education to occupy these hours; and the employments during what are called school hours should be such as tend rather to tranquillize, than to excite the faculties. It is OUT OF SCHOOL—it is on the play-ground, and abroad, and at table, that the vivifying communion of minds between parents and children will take place.

During the season of infancy, and indeed some way on beyond that time, the mind, left to the natural expansion of the faculties, resents what-

ever is continuous; nor should it ever be tormented by compelling it to follow more than a link or two of any chain of ideas. There is practical meaning in the familiar comparison often made of the infant mind to a narrow-necked bottle, which, with due patience, may be filled by drops; but into which it is impracticable to pour a stream. And happily the pouring of drops is an operation well adapted to occupy the time that is actually before us.

In some esteemed works on education we are presented with specimens of inferential interrogation, by the means of which, as we are assured, children may be led a long way through the waters of logic, on easy stepping stones, adapted to their stride, and such as shall bring them into a clear perception that so and so is, and must be true. Now it is granted that a child may be practised in replying to a string of questions, until he is able to give you the expected answer to each; but I am much inclined to doubt if one child in ten thousand actually keeps his hold of a logical clue, beyond the reach of one or two immediate dependencies; or is ever, in any proper sense, convinced of the truth of a conclusion because he has just before assented to the series of premises, in which it regularly terminates.

And what may be said of trains of inferences, may also be affirmed, and for an analogous reason, of all systematic or synoptical exhibitions of the principles of the sciences. It is not, in any

case, the roots, and trunk, and main branches of philosophy, that should be offered to children; but rather its green leaves and blossoms. Digests, and compendiums, we should come to in education, as we come to the bones in a process of anatomical dissection—last of all. To hang up a grim skeleton before a child, and tell him, This, my dear, is your new acquaintance—Philosophy, is no very auspicious mode of commencing the friendship which we wish to induce.

Most of the modern writers who have laboured (and very commendably) in providing elementary books for children, appear to have adopted the principle which, at a first glance, offers itself as natural and reasonable, namely, That the axiomatic rudiments, or comprehensive aphorisms of a science (because it is from them that every thing else results) are the first things to be taught to children; or in other words, that what is last attained by the cultivators of any branch of knowledge, is what we should first impart in teaching it. But this principle, as it stands in contrariety to the process of discovery, for we first employ ourselves upon unconnected and incidental facts, and last of all digest what we have learned in a systematic form, so is it, in practice, opposed to the order of nature, in developing the human faculties.

Generalized abstracts, and synoptical analyses of sciences, highly useful as they are when the learner has already become familiar with a multi-

tude of facts, are not merely useless, but utterly unintelligible beforehand, and while he has few or no stores to be classified. There is nothing the human mind grasps with more delight than generalization, or classification, when it has already made an accumulation of particulars; but nothing from which it turns with more repugnance, in its previous state of inanition.

Children will eagerly snatch up the bits and crumbs that fall from the table of philosophy, when they have no appetite that should impel them to take a place at the board. Elementary books, or, to speak more correctly, First books, should consist entirely of dainty morsels, and of well-gathered flowers; but nothing should be seen in them that is comprehensive: there should be no synopses, no bird's-eye views, no generalization.

The teacher must, unquestionably, himself be master, in a systematic manner, of what he talks about; or he soon becomes bewildered, and falls into positive errors; and by the means also of his own acquaintance with the abstruse principles of a science, he will be able so to select facts as that, while to the eye they are loose and incidental, they may really be the best for preparing the mind to admit what is to follow.

The incidental conveyance of general knowledge, during the early period of education, naturally takes its rise from two kinds of occasions; namely, in the first place, from the

occurrence of words and phrases, in reading or conversation, of which a child asks explanation: and, secondly, from the occurrence of phenomena—ordinary or rare, which may chance to excite his curiosity. And these two occasions of imparting knowledge easily run one into another; as when, for instance, the meaning of a word is asked—Evaporation, and the thing is exhibited, by the holding a damp newspaper before the fire. On the contrary, if the disappearance of the dew on the window has been observed, the technical term may opportunely be connected with it, in the way of elliptical interrogation:—What you see going on is?—Evaporation.

Or some advantage may result from allowing an interval of time to pass between the one sort of explanation and the other; for the mind always holds more firmly that which it seizes by a rebound, as thus—What does this word evaporation mean?—The turning of water, or of other fluids into steam, or vapour, by the application of heat.—Any thing damp is dried by?—Evaporation. After the lapse of some days, the steam arising from a gravel walk, in a sunny aspect, and after a warm shower is noticed; and the question is briskly put—The rain that is fallen on the path is turning into vapour:—what is this called? The answer, if given correctly, at a distance of time, is likely to fix itself indelibly in the memory; and the next step, with an intelligent child, will not improbably be some

spontaneous effort of generalization; as when a bottle of wine, brought from the cellar, is seen first to be bedewed, and then to dry in the heated dining-room — Is not this too — evaporation? And this will lead further:—Can nothing but water and liquids be evaporated?—Yes, we might say, a solid body, such as a lump of metal, or of brimstone, is evaporated, when it is converted into gas, by heat; but then we use another word, and call it—sublimation.

Yet in all such incidental conveyances of particles of scientific information, we should keep clearly in view our real intention; which is by no means that of imparting a certain amount of scientific knowledge, at a certain age; for this is a point of no consequence;—but we simply mean to make a commencement of intellectuality—to keep the mind in alliance with reason and nature; and, if any thing further need be regarded—to familiarize a little the terms and the facts of philosophy, so as to facilitate the arduous studies of a later period.

In truth, if this sort of desultory, and yet well-directed initiation in science is constantly pursued, the more systematic instruction which must at length follow, may be the longer delayed; and meantime that fresh bloom of the faculties may be preserved, which is always more or less impaired by laborious studies.

A very slender apparatus of amusement is found to be enough, where children are accus-

tomed, on the one hand, to much active spor abroad; and on the other, are intelligently conversed with, at all hours, by their teacher. Munificent grandmammas, and affluent aunts, will, spite of remonstrances, continue to be good customers at the toy shop; but those who have actually had to do with children, are well aware of the fact that no delight is so brief as that caused by the possession of an elaborate and costly toy; in truth, the pleasure, as to its continuance, seems generally to be in inverse proportion to the sum that has been lavished upon the gift. And often, in consideration of the kind donor's feelings, a little artifice has to be used in order to make it appear that the splendid article has not become an object of indifference or disgust, the very next day after its arrival.

A crooked stick of his own finding—the handle of a broom—the gardener's cast-off pruning-knife; or a tin mug without a bottom, will be hoarded by a child, and mused over, and converted to twenty whimsical purposes, day after day, perhaps for weeks, and certainly until after the toy which cost what would have fed a poor family as long, has been consigned to the lumber-room.

That principle of the human mind whence springs the pleasure derived by children from toys, has already been casually adverted to when speaking of the happiness of childhood; and it

will demand our particular consideration in a following chapter. For the present, let it be observed that while, as we have said, and as every mother knows, this pleasure bears no proportion whatever to the costliness or high finish of a toy, neither can it, by artificial means, be made to connect itself with some appended purpose of instruction. In addition to what has just been said on this point, I must observe that the use of scientific games, and learned toys, has prevailed as part of the mistaken modern principle of early development and early proficiency. If this, that, and the other branch of knowledge must, indeed, be taught at an age when it is hard to fix the attention, except upon gewgaws, then certainly we do well to dress out philosophy like a doll, and every lesson must be an artifice.

But not a whit of this furtive method is necessary, or indeed tolerable, with children trained to be reasonable, and not tormented too early with systematic teaching. Let play be play, and nothing else. On a rainy day I had rather see a boy amusing himself with cat's-cradle, than with a geometric, or geographical, or historical puzzle. The most egregious sort of nonsense that can be put in the way of a child is learned nonsense:—sheer nonsense is far less likely to pervert the reason and the taste. If they are to laugh, let children laugh at what is purely laughable, not at a masquerade of the signs of the

Zodiac; and let the magic lanthorn keep to its old-fashioned caricatures.*

A child who, in his diversions, is called upon to think, is defrauded of his right, and is physically injured. Besides, that by these same devices an association is formed in his mind between ideas of amusement, and ideas of learning, which renders his efforts of attention to his studies doubly difficult, inasmuch as, while labouring sincerely to keep pace with his teacher, he is annoyed by recollections of play, that have got an intimate hold of his fancy.

The real charm of a toy is derived from the power it possesses to excite the CONCEPTIVE FACULTY; and hence it is that the more it leaves to be filled up by the imagination — the ruder it is, so much the keener, and the more lasting is the pleasure it affords. On the contrary, an elaborate and perfectly representative toy, although it may excite a momentary amazement, quickly loses its power to do so, and is discarded. When carving, and gilding, and painting have done their best to make it the very image of reality, the mind of the child, unconsciously, but in fact, resents the officiousness of the artist, who has encroached so far upon its own province; and it turns with fondness (often to the wonder of by-

* I take the occasion to mention the excellent use to which, at a rather later period, the magic lanthorn, and the lucernal microscope, may be converted, in exhibiting the objects of natural history; and a thousand other things.

standers) to the most misshapen symbol of man, or dog, or house, or horse, or cart, and, by the very means of the glaring imperfections of this image, finds scope for the exercise of its own creative and imaginative powers.

It is confessed that there are some children so vulgar in their tastes, and so inert in mind, as to prefer always what is most staring in colour, and what leaves nothing to be done, or to think of, but vacantly to gaze upon the gorgeous idol of their mindless delight. It is otherwise with those whose natural endowments are such as to render education in any degree hopeful.

The principle of the human mind we are now speaking of, and which, if understood, may be turned to so much account in education, is clearly exhibited in the instance of the pleasure taken by children in pictorial representations. Even the most observant children, of an early age, take little notice of a highly-finished picture, although the subject may be both familiar and pleasing; for, upon the elaborate canvass the child sees only what he can see elsewhere, and with the accompaniment of motion in the objects; and to him, the merit of imitation in the picture is as nothing. Moreover, besides the disadvantage of the ambiguous distribution of light and shade in a finished picture, which more or less perplexes the contour of objects, there is, to the child's eye, an optical inconvenience in looking at a picture, which the adult, by use, has become insensible of, but which,

so long as it continues, is very annoying. In looking at objects at various distances, we learn, very early, so to adjust the axes of the two eyes, by an unconscious movement of the orbits, as to make them meet in the same focus:—whenever this adjustment does not take place, we see a nearer object double. Now a child, because he has but recently acquired the habit of so adjusting the axes of the eyes, is conscious of a something wrong when, in looking at a picture, he finds that the church on a distant hill, instead of requiring an altered inclination of the orbits, must be looked at with the same angular direction of the eyes that serves for the dogs and horses on the foreground. This contradiction of the habit he has so lately acquired, not merely perplexes him, but produces a general confusion of objects, so as to prevent his receiving any vivid pleasure from the representation. It is obvious, moreover, that a *good* picture, which really looks like nature, will shock the visual habit more than an inferior one. An adult has learned how to look at objects which he knows to lie all on the same surface; nevertheless, the very same inconvenience is felt, even by adults, in looking at a panorama; for in this case the deception, being sometimes very perfect, we forget, for a moment, that it is a picture we are looking at; and in attempting to adjust the eyes to the horizon, find the sight painfully strained.

It is however on another account, and for a

more intellectual reason, that a child derives far more delight from a rude outline of familiar objects, than from a finished picture. As a general rule, drawings or engravings in black and white, are, by intelligent children, preferred to the same coloured ; and an outline is preferred to a shaded drawing, and a spirited rough sketch, to a perfect outline. It is not CUYP, or PAUL POTTER, or SNYDERS, or TENIERS, or even WILKIE, or LANDSEER, that enchains the infant eye, or enchants his fancy ; but rather the windmills and Zealanders, the ships and the horses, of a penny broadside. In this class of representations, the rude outline, as unlike the reality as it is possible for any two things to be, that are professed to resemble each other, just serves to quicken the conceptive faculty; and then it is the mind, so set at work, that delights itself with its own creations. It is hardly possible to join five scratches on a slate, having any relation at all to the figure of horse, or cow, so as not instantly to be recognised by a child of two years old;—and with what intensity of satisfaction will this scratch be contemplated ! May we not well admire the construction of the human mind which enables it to find pleasure, so purely intellectual, at so cheap a rate!*

* This important principle of the mind—too little regarded in education, will again engage our attention. In passing, let me be allowed to point out the striking illustration we here find of the immeasurable superiority of the

It is an error, teeming with practical mistakes, to think of children as if they were sensual chiefly, in their tastes. In truth, the disproportion between sense and soul, between matter and mind, is usually much greater with the same individual, in childhood, than it is at an adult age. The want of culture, or the long-continued pressure of necessity, or the indulgence of sensual propensities, often obliterates the intellectu-

human mind, as compared with the most intelligent of the animated orders around us; for the fact of this superiority, as thus illustrated, is not merely a matter of admiration, but it indicates some practical inferences, of which we should avail ourselves. A highly finished picture has, for a moment, deceived the eye of an animal: and the triumphant artist has exulted in receiving so unexceptionable a testimony to the verisimilitude of his work, when the living dog has snarled at the painted dog, or puss has jumped at a mouse in the canvass. But how ridiculous would be the endeavour to fix the eye of the most sagacious dog, for a moment, upon the *outline* of a man or a dog. Yet this very symbol, unlike as it is in size, colour, light and shade, and even actual figure, to the reality, instantly fires the mind of the infant, and he at once expresses his delight, and gives proof of the truth of his recognition, by lisping out the name of the object. The animal, how perfect soever in sense and organ, has little conceptive faculty: to the eye of the brute, therefore, what is not like enough to a known object to be actually mistaken for it, is as nothing—it has no symbolic meaning: to the human eye, on the contrary, the faintest resemblance, or the very remotest analogy, is enough, and more than enough, to put all the faculties a-working, and to send the mind in upon itself, where, even in the earliest season of its development, it finds inexhaustible materials of pleasure.

ality and the moral sensitiveness which had belonged to the child, so that the man at thirty is, in a philosophic sense, much less remote from the brute, than he had been at four or five. The vivid pleasure derived by children from the objects that surround them, instead of indicating the prevalence of the animal part of our nature, is directly a proof of the vivacity and supremacy of its intellectual elements. A child's happiness is the happiness of the SOUL, much more than of the body;—his joys, instead of staying in the sense, go through and through him; and just as a babe of three months old smiles all over, when it smiles at all, and kicks with merriment; so does a child enjoy what he enjoys, with a throb of his every faculty.

I must return for a moment to the subject of graphic instruction, as peculiarly adapted to promote the objects of early education. Far more use might be made of this means of quickening the mind than is often attempted; and let me be allowed to remind young mothers (and young ladies) that, in practical value, the ability to sketch rapidly all sorts of common objects, in a characteristic manner, vastly outweighs some four or five of those accomplishments to which years are devoted in youth, and which are usually laid aside, and lost, when the duties of domestic life are entered upon. Prints, it is true, may be purchased; but beside many objections to which they are liable, and their cost, if provided in

sufficient number and variety, it is found that a fresh sketch, adapted to the occasion, and suited to a child's age and taste, imparts more pleasure, and subserves better the ends intended.

A mother, qualified to use her pencil in this manner, may, without labour, bring all the most familiar and the most striking forms of nature and of art before the eye of a child; and thus, not merely impart various information (a secondary object) but feed and furnish the earliest developed of the faculties—the conceptive; and at the same time bring into action the powers of observation and discrimination; and all this may be done without in the slightest degree stimulating or straining the faculties: the brain is not worked in any such amusements.

By the same simple means, the kindly emotions and placid sympathies of a child's heart may be set a-going, if a mother's pencil is equal to the task, and it is not a very difficult one, of roughly sketching the employments, incidents, and accidents of common life—the trades and occupations of men, and the domestic drama, if the phrase may be used, and the mishaps and catastrophes of the soldier, the sailor, the traveller. A folio of such sketches, swelled from year to year by daily additions, would be an invaluable treasure in a family, and might descend to the mammas of several generations; and how much more creditable to the hand that ropduced it, than the painted albums, and the bristol-board

frippery, that so often load a drawing-room table!

If I mention MUSIC only in passing, as a capital means of early education—the education of non-development and of pleasure, it is not because I think little of its importance, but simply that I do not venture to speak in detail of what I do not practically understand. It must however be confessed that, highly desirable as is music as a means of pleasurable excitement, the full benefit of it is restricted to those whom nature has specially endowed in this behalf, as well with ear as voice, and with the musical soul. There are families, not wanting in other endowments, but who want what art cannot supply—an organic aptitude in relation to melody.

There can be no doubt that poetry should be employed as a principal means of intellectual and moral culture, during the first period of education; and by POETRY, as adapted to infancy and early childhood, I intend, severally—rhyme—rhythm—ornamented description of familiar objects, and condensed moral sentiment. Each of these elements has its special use for the purpose now in view; but it need not be said that the higher elements of poetry, that is to say whatever the adult mind regards as constituting its paramount excellence, are excluded when we are speaking of verse for children. Not indeed as if poetry for children should be *unpoetic*, or

of cheap manufacture; but that it should tread flowery meads, rather than climb the mountain path, or soar to the skies.

No one who has had to do with children can need to be told that both rhyme and rhythm are of great utility, considered only as organic means of fixing certain series of words and sentences in the memory. This is understood in every nursery; nor does there appear to be any backwardness in applying so obvious and easy a means to all purposes of instruction. I would, for my own part, largely employ the rhythmical medium for conveying whatever has any manifest analogy with pleasurable imaginative sentiments: but then, and for the very purpose of securing to it its greatest possible effect, on this its proper ground, I would (notwithstanding certain specious reasons of convenience) entirely refrain from the use of rhyme and metre as a mere implement of memory, and for the conveyance of dry facts;—such as terms of science, dates, and the abstract rules of grammar, or the like. These seemingly useful devices—the jingling grammars—the jingling geographies—the doggrel histories and chronologies, such as—

> Charles the First was his son, and a martyr made;—
> Charles the Second, his son, was a comical blade:

or stanzas interrogative—such as—

> And who was by an arrow slain,
> While chasing the fleet stag in vain,
> And left his brother next to reign?

are to be rejected as vitiating the taste; while, although to a very limited extent this species of doggrel aids the memory, it quashes the mind, and obstructs that intelligent grasp of facts which is really of importance; while the lodgment of facts in the memory may readily be secured by more fit means. For example, after history has been read, (and it is of no use at all previously) and when distinct ideas are attached to names, then the series of persons and succession of events may with great ease and clearness be fixed in the mind by frequent references to a well constructed home-made chronological chart; and an intelligent child—intelligently dealt with, will then spurn the toy history-book, as fit for babies only; and if we are thinking of babies, they had much better listen to the—Who did kill cock Robin? than the—Who did kill king Rufus?

Verse for children should always embrace some substantial element of poetry;—it should present, what is really poetic of its kind, however familiar. Contrary to what the inexperienced might suppose, and to what many writers of verses for children appear to have taken for granted, it is by no means the most prosaic, or the most nakedly intelligible pieces that are chosen and delighted in by children, when left to make their own selection. What has just been said in relation to toys, and to the products of the pencil, is true also of verse; that is to say, the very same

principle of the human mind comes into operation. Children, in almost all cases, are the most delighted with that which the most immediately quickens the conceptive faculty, and which leaves much to be done by the imagination; while that which is frigidly exact, and merely true, does not arouse the mind; and, on the other hand, that which is gorgeously descriptive, and highly coloured, fails entirely to attract a child's ear. Strange as it may seem, I think it is generally true that children will sooner listen to what is purely didactic, if the sentiment and language be at all within their reach, than to a vivid and elaborate description of natural scenery. The poetry which children choose is that which, with a light descriptive brevity, brings the familiar aspects of the visible world before the fancy; and that also, which is simply and briskly narrative, and which is enlivened by turns of humour, and deepened by just moral sentiments, and especially by touches of pity.

We should by no means lose sight of poetry as the medium for imparting, in the easiest manner, a knowledge of the less colloquial portion of the mother tongue; and particularly of the entire class of descriptive terms. With these, as I shall have occasion hereafter to show, it is very desirable to furnish the mind in rich abundance, and as a main part of its early culture.

We cannot, therefore, wish to see poetry for children broken down into monosyllables, or

confined to the range of the nursery vocabulary. The wealth and compass of a language is to be acquired, not by fingering a dictionary, or by committing definitions of words to memory; but by the gradual extension of that unconscious inductive process, which goes on when words, in their true and infinitely varied connexions, are presented to the mind—are heard, a first, a second, and a third time; and not understood until, by little and little, a meaning, more and more precise, clusters about the sound. Some teachers, and intelligent mothers, exhibit a very needless alarm, lest, in what a child reads, or commits to memory, there should occur any words to which he attaches no meaning, or a wrong one. But what, we may ask, is the mischief that ensues in any such instance? Is the circumstance of his not understanding a particular term, which he happens to hear, or to read, any greater harm than his knowing nothing, at present, of the thousands of words which do not come in his way? or if we think of the single passage in which some such unknown word occurs, it does not always follow that no meaning will be gathered from it, for want of the one unknown word; and besides, the understanding of a sentence, or paragraph, implies much more than the ability to tell what each separate word means; so that the error, or the deficiency, in regard to one or two words, will often be found to bear a small proportion to

the general confusion or misapprehension that attaches to the structure of the sentence, or to the dependence of ideas through a paragraph. An unknown word in a sentence is like a deep shadow in the landscape :—just on that spot the eye discriminates nothing ; but many a sentence, the meaning of every single word of which a child can give you, is all dim as twilight, or absolutely dark as night.

Words learned in the first instance by formal explanation, are found to be peculiarly liable to ambiguities of apprehension, or to be substituted one for another; and they continue to be the last words in the language that promptly and appropriately occur, when wanted in extemporaneous discourse. With a view therefore to an ulterior advantage, it is desirable that the wide wealth of the language should come into the mind in the natural order ; that is to say, by a gradual familiarity, first with the mere sounds - not understood ; and then with the meaning, by many steps of approximation.

Poetry for children should be freely sprinkled with long words, and with words of less frequent occurrence. What we have more to guard against than hard words, or than tropes, or bold metaphors (which children often catch with ease and delight) are either sentiments of a kind with which they can have no sympathy ; or notions and modes of expression that are abstruse and philosophical.

It would be an easy, though somewhat invidious task, to find instances of this sort of miscalculation among the very best samples of poetry intended for children. I do not mean to say that in such cases any serious mischief is likely to accrue from the error, or that parents ought to exclude whatever appears liable to exception on this ground; but merely wish to state the principle, that a monosyllabled stanza may, by presenting an adult sentiment, or an abstruse notion, pass clean over a child's lips, without communicating one particle of its meaning: or that what to ourselves may be highly poetic, connected with the circumstances, or the manners, or the aspects of infancy, and which, when elegantly expressed, may delight us intensely, will probably be as unintelligible to a child as a chorus from Sophocles. Lines such as the following, on, or about, an Infant's Evening Prayer, are adapted, in fact, to the mother, not to the infant:—

> Ere thy lips could a lengthened sentence frame,
> Or utter a perfect tone,
> We taught thee to lisp thy Maker's name,
> And bow at his heavenly throne.

The boldest figures are readily understood and relished by very young children; thus the verse which so happily paraphrases the imagery of the 19th Psalm—

When from the chambers of the east,
His morning race begins,
He never tires nor stops to rest,
But round the world he shines;—

needs very little, if any explanation, to lodge it fairly in the understanding of the youngest child who can lisp it. But very many words must be spent before a much older child would attach a meaning to phrases so utterly abstruse as those which make up the subjoined Mother's Lullaby, and which must be regarded as intended solely for her edification.

Still be it mine, through life's long varied morrow,
Thus every thorn from thy couch to remove;
Guard thee from danger, and shield thee from sorrow,
And love thee as mothers alone ever love.

It would seem hypercritical to specify a great deal of what is given to children, to read and to learn, and which may in itself be very beautiful; but which embodies the feelings and conceptions of the mother about her child, rather than of the child itself. In the following verse on the Crocus, the first line contains a word that perhaps may not be understood without an explanation—easily given; but it may be questioned whether the abstraction and the prosopopœia embodied in the last line, although no hard word occurs in it, could easily be made intelligible to a child of the age for which the piece seems intended:—

Down in my solitude under the snow,
Where nothing cheering can reach me ;
Here without light to see how to grow,
I'll trust to nature to teach me.

So long, however, as what is vulgar, or glaringly absurd, is excluded, and also what is false in fact or sentiment, we need not be very nice in making our selection of poetry for children ; inasmuch as it is always true that what does them no harm, does them some good, so far at least as it renders the compass of the language, and the various combinations of phrases familiar to the ear. A squeamish or hypercritical taste would too much diminish the existing stock of verse adapted to childhood.

Children are more or less alive to wit, as well as to humour and drollery; and when genuine wit is compacted in epigrammatic couplets, and is of a sort which they can apprehend, it has a great use in quickening the faculties. Humour and drollery are contrast:—wit is analogy, to perceive which is one of the best preparatory exercises of the faculty of abstraction. Intelligent children will often catch a stroke of wit, before they exhibit any relish for humour. They may, indeed, be amused by a sprightly narrative, while the humour that is strung upon the thread of the story entirely escapes their notice. It is thus that John Gilpin is laughed at by children as a droll adventure ;

but is not relished on account of the innumerable strokes of good-humoured satire with which it is fraught.

We sometimes find children making a more rigid demand for reason and truth, in what is offered to them for their amusement, than we are ourselves accustomed to make, or than we make in what we provide for them; and it is an occurrence that should be avoided, if possible, for a child, after inquiry, to be forced to reject, as sheer nonsense or absurdity, any thing which his teacher had put in his way. This sort of revulsion of the mind insensibly, but really, disparages a teacher's influence.

It need hardly be said that satire, when in a form which children can understand, should be absolutely kept out of their sight and hearing: it is addressed directly to the malign sentiments, and can in no case be of happy influence, even when, seemingly, the force of it bears wholly upon some form of vice or folly. Satire is useful (if at all) in dealing with those who, having again and again heard reason, and spurned it, may perhaps be reclaimed by shame. But this is never the condition of children—or at least of well trained children. There are, however, certain celebrated works, mainly satirical, but yet in so occult a manner as that this pungent element passes harmless and unnoticed through young minds. Books of this sort (if otherwise not objectionable) may be listened to by children

as mere entertainment. Such are Don Quixote, Gil Blas, and Gulliver's Travels:—the poison is a kernel within a stone.

Some children, apart from task work, and without cost of infantine hilarity, may, during the period ending at the completion of the seventh or eighth year, have acquired a considerable amount of general information;—others may have learned little or nothing. This disparity is not however to be cared for by the teacher. Much less should she labour to lessen it by using any stimulating methods with those who lag behind; for this cannot but be injurious. Whether the child of slow apprehension will always remain in the rear of others, or may hereafter overtake and pass his competitors, is uncertain:—if he does, then our anxiety has been groundless—if not, fruitless; for this backwardness, in such a case, is the indication of an original intellectual deficiency which no efforts of ours can supply.

Infancy, as I have said, is emphatically Nature's season; and parents may be thoroughly contented, so far, who see their children reach the verge that separates infancy from childhood in blooming health—happy in habit as in temper; with transparent dispositions; with a curiosity alive; with a moderate command of language; and, if I may be allowed the figure, with a lap full of the blossoms of philosophy, unsorted and plucked as they have come to hand.

One might say even less than this; and yet

affirm that the period of infancy has passed auspiciously, if only the cheek be ruddy, the eye sparkling, the sympathies prompt and kind, and the habit of implicit obedience thoroughly formed. Happy are the parents who are devising the more elaborate processes of education, and are just commencing what may be called the business of instruction, with children of seven and eight years old, of whom as much as has now been stated might be affirmed—and nothing more.

In a word, if the anxious inquiry of some parents in relation to infancy and early childhood is—What are the most effectual means of development? the inquiry which I would substitute for such a question is of this sort—How shall we best pass over the same period without any development but what is wholly spontaneous?

CHAPTER V.

THE SECOND PERIOD OF EDUCATION.

The points to be adverted to in the present chapter, although more numerous and comprehensive than those which claimed to be noticed in the last, may be more hastily touched here; inasmuch as they constitute, severally, the subjects either of the following chapters, or of another work. At present I intend little more than to notice some of the more striking intellectual characteristics of the season of life we have now in view.

Once again, and at this point of our progress, I feel inclined to put the question to parents who are intending a home education, whether they possess strength of purpose such as shall enable them to witness, tranquilly and without mortification, a display of the intellectual exploits, and various acquirements of children who may have been hurried forward on the principle of develop-

ment, while their own, with faculties still held in store, are compelled to retire altogether from the ground of competition? This fortitude is indispensable to whoever would pursue a consistent course of intellectual training, on the principles recommended in the present work; and not only will the same firmness be called for during the early, but also during the later periods of the course; for the process we are devising intends nothing short of the full expansion and vigorous exercise of the mind, when it reaches the latest season of its natural perfection.

And it should moreover now be said that, in laying down a plan of regular instruction, as commencing about the eighth year, regard must be had at once to a child's natural capacity (so far as it can be surmised) and to his probable destination in life. Education is, in fact, of two kinds, broadly distinguishable the one from the other: the first being that method, and that amount of instruction which is practicable in the case of those whose intellectual culture must be concluded in their fourteenth or fifteenth year, and who, thenceforward, are to be occupied with the engagements of common life; the other kind of training is that which is designed to extend a full seven years further; and which includes whatever can serve to give the highest possible advantage to such endowments as nature may have conferred on the individual.

If the former sort of culture be all that can

be aimed at, there is then assuredly not much time to be lost within the six or seven years we have in prospect; and the several processes of instruction ought to be advanced at as quick a pace as will consist with a child's health and cheerfulness.

But in the latter case, the period from the eighth to the twelfth year may be regarded as a second infancy, during which there is still to be a leaning to the side of repression, rather than to that of excitement.

Now inasmuch as it would be a cumbrous method, involving repetitions, to exhibit these two species of mental discipline separately, it must be understood, that, in the course of instruction recommended, it is mainly the second, or more perfect scheme which I have in view, and which will require to be so far lowered or abated as may be found in practice necessary, when the shorter term of education is to be calculated upon.

The season of early childhood, as compared with the preceding years of infancy, is distinguished, as well in other respects, as by a distinct consciousness of the passage of time; and this simple circumstance renders a different mode of treatment necessary. A child, before its fifth year, and even later, if in perfect health, does not know that the day is long; for the infant mind glides down the stream of moments, conscious only of the present, and altogether without thought

of periods, intervals, and measured seasons of duration: the infant mind has no weariness, or disquietude, connected with the slow numbering of hours, days, weeks, months. But at length, and in proportion as the mind acquires the habit of pondering upon its own condition—of reflecting, it becomes an occupant of duration, and learns to measure the eras of the day by the periodic changes of its own feelings.

This mental revolution must then be provided for by stated occupations. Deprived of this means of diverting the uneasy consciousness of time, the mind either sinks into inanity, or seeks relief in the devices of a mischievous activity. The listlessness of a child is altogether a different thing from the inapplicable thoughtlessness of an infant; and it is a state of mind which should always be relieved. As soon as time is *felt*, the mind and the body have only the alternative of being employed or idle; and idleness is not a passive but an active ill.

At the entrance upon childhood, there is therefore needed the forms, at least, if not much of the substance of serious application. There must be school hours; and a certain regard paid to the clock, even in relation to amusements. As to the two, or perhaps three, hours of the day, at twice, which are spent in school, it will be easy to fill them up with a jog-trot application to the mechanical branches of education. But here, a capital distinction between school and

home education must be pointed out, and should be clearly understood, which is this, namely, that, in the former, the entire mental culture, or nearly so, has to be conveyed during the school hours, and those times that are devoted to the learning of tasks. It is requisite therefore to have recourse to whatever excitements or devices may serve to accelerate the process of learning, and to condense the greatest possible amount of acquirements and of proficiency, within the narrow limits to which the teacher is confined: there must be a stress laid upon school hours.

But every thing is different at home; or at least in a home such as we have now in idea before us. At home the mental culture—the better part of the education, is carried on, not exclusively, and perhaps not chiefly (and scarcely at all during the period of early childhood) in school hours. These are times of tranquil, unintellectual occupation—the resting times, as well of the body as of the mind. As there can be no motive whatever for hurrying forward the ordinary branches of mechanical education, such as reading, writing, arithmetic, drawing, music, which, without doubt, will all be duly acquired as early as need be wished, they may be leisurely pursued, to the entire exclusion of what, to use an expressive French term, we might call *empressement*. These common acquirements serve to occupy the hands, the eyes, and the organic powers of the mind, while its proper force is

unspent, and while the animal force is husbanded by a temporary restraint.

If there be any modern improvements, or any ingenious devices which tend to abridge the labour of learning and of teaching the mechanical branches of education, let them be freely admitted; for we can be no losers by a saving of time. But no such means are desirable if the intention of them is to hurry these processes forward at a quicker rate. If, by a certain method, a child may be taught to write eventually *better* than otherwise he would, let it be adopted; but if the alleged advantage of a new method be that a child may be made to write like a master, in a dozen lessons, then we say that we wish for no such rail-road velocity, and are pretty sure that it is not to be attained without a *high-pressure*, such as we totally exclude from our home system.

We suppose then that, during the period of early childhood, or between the eighth and the twelfth years, the ordinary branches of education are resorted to for the purpose of finding so much sedentary employment, every day, as may be really desirable; and that this degree of attention to these necessary acquirements will, in the end, fully secure a proper proficiency in them. These matters are not the objects of any solicitude; and if parents retain in their own hands whatever belongs to the higher culture of the mind, they may readily obtain any assistance they may need in imparting the common rudiments of learning.

To return to what properly belongs to the culture of the mind.—The period of early childhood is especially the time of ORAL INSTRUCTION; for we still hold books under an interdict, and are jealous of tasks. During the first of the three eras of education, knowledge is conveyed by the teacher's being ever ready to meet the freakish curiosity of the infant mind, with a something more than itself seeks or intends. During the second of these eras, a further amount of knowledge is imparted, and the expanding faculties are exercised, by that sort of defined instruction which the teacher originates, and which he controls, and limits, and in conducting which he secures animated attention, and forefends listlessness by the vivacity of his manner, the versatility of his methods, and the fertility of his invention. But during the third era the learner is called upon to take up his full share of the general labour of education;—he is to do at least as much for himself as his instructor does for him; and the two, with a good understanding of their several parts, and a firm resolution to overcome all difficulties, ascend the arduous height, hand in hand.

I have said that early childhood is the time for oral instruction, and that, whereas heretofore this was desultory and fortuitous, it must now become in some degree systematic, comprehensive and precise. Indeed an indication of that natural development of the mind which takes place

about the ninth year, and which we may name as the *second* characteristic of early childhood (a consciousness of time, being the first) is, an endeavour to connect and arrange, in some way, its acquired stock of ideas. It is this tendency of the mind toward ORDER, and this desire to grasp consecutively, and in connexion, what it already holds in fragments, that prompts the many questions which are put by an intelligent child, and which are usually prefaced by a statement of facts, seemingly at variance. Parents must have noticed the circumstance that a child whose curiosity is at all intelligent, much less often asks a naked and insulated question than propounds a difficulty. Now these difficulties are, for the most part, instances of the apparent disagreement of things, which, in a child's view of the whole case, ought to fit; and accordingly he begins in this sort of way — Papa, you said so and so; but how is it then that I see so and so? The very common question, How can it be? indicates a tendency of the mind toward induction or simplification, or generalization, as the case may be; and we may safely infer, from any such indication of nature, that the process of mental culture should now assume a more systematic form.

It is only a few children of the rarest promise that very eagerly demand this sort of satisfaction; but there are few who seem totally indifferent to it, when placed before them; and the intelligent

teacher will be prompt to avail himself of the mind's first struggles, be they never so feeble, to obtain the comfort of internal order. There is at this period a tendency in the mind to what may be called crystallization, and the part of the teacher is to promote it, and to guard it from disturbance.

Now the most obvious principles of mental order, are those relating to TIME, PLACE, FORM, and CAUSATION; and there is something which may be done in connexion with each of these principles, for giving consistency to a child's acquirements and conceptions; as thus:—

A child of six years old readily listens to single stories, drawn promiscuously from sacred or profane history, or to descriptions of places and scenes; but he never spontaneously desires to connect any such insulated narrations, one with another; and it must be accounted an ill-judged attempt to impart any thing that the mind feels no want of. You may, if you please, compel a child to commit dates and summaries to memory; but the process anticipates the course of nature, and is a drudgery worse than useless:—the mind as yet does not grasp either time or space.

A year or two later, however, these very notions begin to be sought after; or, when intelligibly presented, are gladly admitted. In addition therefore to the single incidents, or the scattered leaves of history, we may now convey some general conception of the flow of ages, and of the

progression of human affairs : and this conception may be mechanically aided by the use of a clear and well-constructed chronological chart; the principle of which, if not fully understood at once, may be illustrated by placing before the learner a chart of his personal history, marked off in divisions of months and years. But it need not be said that, in the use of means such as these, our intention is far from being that of enabling a child to tell you, in a twinkling, and to the astonishment of a company, who were the consuls at Rome in the year of the death of Epaminondas; or who was the Greek emperor at the time of the battle of Hastings. Nothing of this sort of accomplishment is worth a straw; at least it is not worth the labour it must cost, as well the learner as the teacher. What we aim at is to enable a child to grasp and to adjust the notion of time within his own mind, just as far as nature impels him to do so.

Or again, it is seldom earlier than the ninth year that a child begins to labour with the notions of remote space—space out of sight, or that he connects any just idea with the map which he is condemned to pore over. But when once the conception of terrestrial extension has fairly lodged itself in his mind, then our conversations concerning the natural wonders of different countries, and the personal appearance and manners of the several families of man, and the species of the animal and vegetable orders, may

assume a more digested form; and, by the aid of the terrestrial globe—always before the eye, that which heretofore was only so many scattered particles, falls into shape and order; and the mind not only knows so and so, but holds and commands what it knows. Of little utility, as I think, is the accomplishment, for a child, to be able to tell you that Canton is Long. 113 deg. 7 min. East; and N. Lat. 23 deg. 8 min., but it is of solid advantage to him to have obtained so clear a conception of the position and figure of countries, as that he can sketch the outline of any on his slate, with tolerable accuracy, from memory.

Once more, and to speak of the third of our above-mentioned categories, namely — FORM. During the last year of the first period of life, much tranquil excitement of the faculties may be derived from exhibitions and descriptions of the more striking and beautiful forms of the vegetable and animal kingdoms: yet in conveying this sort of information we adhere to no rule, except that of chance, or of immediate entertainment. But before the expiration of the second period, something may have been done with the view of giving the mind a grasping hold of the details of natural history, by the aid of classification. Just so much effort of abstraction as is required in admitting this kind of aid to the memory, the mind is capable of about the eleventh year: and indeed, if the teacher will

but condescend to put out of sight and hearing all the apparatus, and to exclude all the polysyllabled nomenclature of scientific classification, whether botanical or zoological, and will bring forward such grounds of distinction only as the unsophisticated notions of children may consist with, and such as are derived, principally, from manifest resemblances of form, they will, in most instances, receive a lively pleasure from the exercise, and will show how agreeable to the human mind is any sort of simplification, and how fond it is of order.

Lastly; it is in relation to cause and effect that the mind spontaneously, and at an early period, indicates its love of order and of fitness. The question—What is the reason? which is every day propounded by an intelligent boy, is an indication of the opening of the rational nature, and leaves us in no doubt as to the change which is called for in the mode of culture.

In the present chapter I do nothing more than just mention those intellectual characteristics of the period of early childhood which call for the methods of treatment that are hereafter to be specified. As to the relation of Cause and Effect, a large part of the mental training, at a later period, bears upon it; and we shall find it necessary to pursue the subject in its different bearings, at considerable length. The glory of the human mind (intellectually) and the spring of its advancements in the higher and the lower

range of philosophy, is this insatiable appetite to pursue the links of causation: that system of education therefore must be deemed very defective, and must be accounted a practical calumny upon our nature, which does not mainly concern itself with a propensity so strong, and so ennobling. Without intending to inculpate practices and methods of training which perhaps could not be changed in schools without some serious compromise, I may at least say that HOME EDUCATION will secure to itself a high recommendation if, on this point, it be able to adhere more closely to the manifest intentions of nature.

I freely grant that a good school education does give some useful exercise to the faculty of abstraction, and to the reasoning powers; but I confidently believe that vastly less is actually effected in this way than is desirable, and than might with ease be accomplished. Notwithstanding the many motives of passion and interest that pervert the judgments of mankind, we should see truth and reason prevail more steadily and rapidly than we do, if the rational faculty were systematically trained in early life. This is my strong conviction; and it is a chief motive with me in bringing forward my notions of home education.

Something then we suppose now to be attempted, with the view of meeting the instinct of the mind in striving to connect and arrange its scattered ideas, especially in respect of TIME,

SPACE, FORM, and CAUSATION. Meanwhile, and after a little system has been introduced, along with the various and insulated facts that are every day accumulated, the style of desultory conversation, and the kind of books that are perused, will be insensibly conformed, more and more, to the symmetry and precision of actual science; so that before the period when philosophy comes to be professedly cultivated, there will be little in such studies that will seem utterly strange. The encyclopædia of human knowledge will have been fingered in all parts, before it comes to be consecutively read.

It is a great point gained, in my view, to give the mind a desultory familiarity with every subject to which at length the attention is to be strenuously directed; for it is by this means, chiefly, that we are to provide against those rigid intellectual habits, and those exclusive professional tastes, which, when once formed, are seldom if ever broken up, and which render high attainments so often the means rather of narrowing than of expanding the mind. How often are accomplished men the bigots of the particular branch of literature, or philosophy, which they profess; and never reach, or wish to reach, the serene height whence a view is had of the broad expanse of the world of mind. I think this contractedness of taste seldom gains entrance with those who, early, and during an entire period of their mental course, have been led every day to hold easy

converse with whatever is intellectual, how diverse soever in object and spirit.

At the time of the transition from infancy to childhood, the intellectual, as well as the moral treatment requires to be modified in conformity with the newly developed power of entertaining reflex and complex ideas.

An affectionate child of five years, who is yet an infant according to our distribution of ages, loves and reveres a kind and judicious mother; but three years later he comes into the recollection of the fact, that he *has* a kind and wise mother; and this reflex consciousness, added to his heretofore spontaneous affection, becomes the spring of new emotions, and the impulse of new modes of action. This topic, however, belongs to another branch of the general subject of education, and must be passed, with a hint only—that there is room for a nice discretion in just saying enough, and not too much, with a view of giving form and specific direction to the undefined evanescent feelings that are evolved in a child's mind about the time we are now speaking of. Incalculable indeed is the power of words, when sparingly and skilfully employed, for the purpose of aiding the natural metamorphoses of the mind. The soul, in the critical moments of its physical history, may be teeming with emotions that it knows not how to define, and which, wanting definition, it may lose its hold of. It is indeed an

inexpedient practice to be often talking a child into a persuasion of its parents' goodness and wisdom, or of its own felicity; or to be telling him that he *ought* to be very happy. But without approaching any thing so ill-judged, occasions may be looked for, and seized, when the very sentiment which the mind is labouring with, and would fain express, may be placed neatly before it, so as not again to be lost. It is thus especially that the filial sentiment may, with happy effect, be defined and formally commended to the custody of the understanding, at the time when it begins to be indistinctly felt in a reflex manner. The parental love is the light and warmth of the little world of home; and it may be felt and enjoyed, just as we feel and enjoy the temperature and the diffused illumination of an overcast summer's day, without our thinking of the source of both. But it is well that the bright fount itself should be regarded, in its individual power, even as we behold the sun in the midst of a cloudless sky.

But to return. There is developed, during the years of early childhood, a consciousness of the intellectual state, which, if we avail ourselves of it, becomes the leading impulse of advancement. The mind now learns to pass up and down the course it has travelled, and to measure its way; and although that principle of non-excitement, which we hold to, forbids that this new

feeling should be much worked upon, it may be gently cherished, and aided, so far as may serve to quicken, without stimulating, the active powers.

The power also of entertaining more trains of ideas than one, simultaneously, on which so much of practical efficiency depends, in all walks of life, begins to develop itself about the same time; and must be watched and elicited; but this too is a subject of such importance as to demand separate treatment. Many of the points of contrast between a cultured and an uncultured mind—between the vulgar and the refined, turn upon the training that may have been bestowed upon this very power.

The moral and the intellectual branches of education are again involved in another characteristic of childhood, as distinguished on the one side from infancy, and on the other from a stage three or four years more advanced. What I mean is that penetrating and instinctive discernment of the character and motives of those around them, which is not often possessed earlier than the fifth year, and which is often lost, or set wrong, about the twelfth. It is true that the youngest infants sometimes exhibit an instinctive complacency, or repugnancy, toward those about them; but it is not generally found that these likings and dislikings have any correspondence with the real dispositions, or merits, of individuals: they seem rather to take their rise from merely accidental peculiarities of the personal appearance.

There is however something far more just and deep in those discriminations of character that are often made by children of seven and nine years old. Not indeed that all children have any such discernment of spirits; but few are totally destitute of it; and more than a few (girls especially, whose perceptions are more acute, and who, from their being much at home, and silent spectators of whatever is to be seen there, become accomplished dissecters of character) seem to dive into the bosom of whoever they have much to do with, and even of some whom they see but for a moment.

A sensitive and taciturn girl in her ninth or tenth year, estimates the moral worth of each member of the family, not exempting her parents from her searching tact: she calculates the strength of purpose that belongs to each; discerns the disguised selfishness, or the vanity of each; and especially, if the character of an adult be alloyed with any admixture of faithlessness, pretension, or hypocrisy, she sees through the mask, as if it were of glass; and once and again plainly utters what she irresistibly feels to be true. Between such a child and the real qualities of those around her there seems to be an electric sympathy, superior to reason, and independent of evidence.

An adult is often imposed upon; and children too may be betrayed and deceived by active endeavours to delude them; but when left to their

silent perceptions, they are seldom utterly in the wrong in their estimates of character. Children, with all their levity, are really much more at leisure than most adults; and they quietly see, and hear, and ponder, while their superiors are talking, acting, and intently pursuing some particular end. They fix their eye upon the shades of difference that distinguish the manners and language of one from another:—they are peculiarly sensible of contrasts in character, which adults have forgotten to take notice of; and as they are altogether unbiassed by the world's opinion, of which indeed they are ordinarily ignorant, and are moreover not yet alive to those artificial motives of candour and charity to which we often surrender our involuntary inward convictions, and even our better judgment, they, in clear simplicity, come to a conclusion with a sort of Rhadamantine impartiality which astounds us, sometimes, when we happen to catch a whisper of it.

This discernment of character does not however remain long in its unimpaired clearness. In part it is merged by a gradual assimilation of the dispositions of children with those around them: that is to say, the contagion of family tempers, and the infection of those of the wider circle to which children may have access, affecting at length their own character, destroy their sensibility, and render them unconscious of what at first they had vividly and even painfully per-

ceived. Then again, a child's instinctive judgment of character becomes every year less and less decisive, as he mixes more in society, and listening to common opinion, finds, in very frequent instances, that his early impressions concerning individuals are contradicted by the conventional reputation which such persons enjoy in the world :—a child thus learns first to give up, and then to pay no regard to his private judgment, until the very perception is blunted.

But the practical inference to be drawn from these facts is this, namely, that although, during the earliest period, a parent's or a teacher's character is not discerned by a child, while during the later period it becomes obscure, during the middle time, of which we are now speaking, it is so acute as to demand the most especial regard to be paid to it. The parent or the teacher must not think to screen herself from the penetrating eye of a child of nine years old; but must, for there is no alternative, cultivate and practise whatever is ingenuous, wise, firm, and pure. This is the season eminently for laying a good foundation of filial reverence.

But it must be remembered that a child's intuitive perception of the moral qualities of those around him, is accompanied also, although not usually in so decisive a manner, with a quick perception of any bungling in the explanations that he asks for, and of any inconclusiveness or sophistry in the reasoning that is addressed

to him. An intelligent boy often feels much more than he can put into words, of the non sequitur of an inference:—he has a sense of absurdity, long before he has learned how to hunt it out; and although his respect for his teacher may impose silence upon him, he does not fail to harbour a recollection of having seen him floored.

A teacher may more easily conceal his ignorance, and save his credit when he has got into an untenable position in dealing with a youth who knows just enough of logic to be made the dupe of adroit sophistry, than in converse with a sharp witted, simple minded boy of ten years old. Here then again, we reach an inference analogous to the one above named, the tendency of which is to impress upon the teacher the necessity of adhering to sheer truth and perspicuity, in his treatment of children during this middle period. It is not yet the time for teaching logic; but it is in a most emphatic sense the time for watching over the just-evolving reason, and for guarding its instinctive rectitude from violence, from disgusts, and from confusion.

The tenth and eleventh years are, I think, the times when internal revolutions often take place as well in the dispositions, as in the intellectual conformation. By internal changes, I mean such as seem to arise from occult causes, probably of a physical kind, and which are to be distinguished from modifications of the character

plainly attributable to known external influences. These changes, as affecting the moral condition, demand often a nice regard, and skilful treatment, on the part of parents: but to speak only of such as belong to our present subject: it is about this time, if ever, that remarkable faculties, and those rare endowments which constitute genius, if they have been latent during infancy and early childhood, begin to make themselves perceptible. That which shows no bursting bud in the twelfth year, probably will never be found to belong to the mind at all.

It is about this time therefore, that, with little hazard, parents may so far calculate the future course of their sons as is requisite for determining the sort of education they are to receive. Not that the particular calling or profession need be, or can be, fixed upon; but it may then pretty well be known whether a boy is to follow the common gainful occupations of an ordinary course, or is to devote himself to some one of the intellectual professions. This forecast of the future course regulates every thing in the quality and quantity of instruction to be imparted.

Again: the middle, as distinguished from the earlier, and even the later periods of childhood, is not unfrequently marked by a sort of thoughtfulness, or pensive tendency to muse upon the conditions of human life. It is as if the mind, in reaching the first hillock on its journey, were halting a moment to ponder the landscape before

it. The infant does not reflect in any such manner; and as to the youth of fourteen, the ripened vigour of the animal system, the higher energy and wider range of the desires, and the greater pressure and variety of all sorts of engagements, dissipate effectively the meditative humour; and in truth vulgarize the mind, and impel it to accept, without inquiry, whatever it finds suited to its tastes.

It seems as if each marked era of human life were preceded by a season of thoughtfulness, often indeed diverted by cares, follies, passions, or eager interests; but indicating itself whenever the mind is sufficiently sedate, and its position sufficiently settled, to allow a tranquil interior change to become perceptible on the surface. At these moments, and in connexion no doubt with physical changes, a tinge of melancholy pervades the mind, and the balanced good and ill of existence is surveyed. The mind too, at such seasons, tries its strength upon those insoluble problems which sages have so often professed to have disposed of, but which still continue to torment human reason, even from its earliest dawn. There are indications sometimes of a crisis of this sort in the fifth year; still more decisively in the tenth or eleventh; and again in the eighteenth. It is at these moments that the soul comes to a stand, for an instant, and asks—Whither am I going?

A child of five years old gives utterance, in all simplicity, to its perplexities, of whatever

sort; but it is not so with one of ten or twelve, who often harbours and inly revolves ideas which he either knows not how to clothe in words, or which he wittingly conceals in apprehension of the disapproval, or the disregard with which he supposes his difficulty would be received by a common-minded teacher. But a vigilant parent will catch these dim indications of the occult mental distress, and deal with them as his skill shall direct. If the solecism may be allowed, one might say, that the silence of the labouring spirit, at such a time, should be listened to; and what it would utter should be translated in the fairest terms, and wisely replied to.

At the very same nodes of the mental cycle, intelligent children take a sudden glance at various subjects of philosophy in a way that the adult mind has perhaps lost the power of doing. Some palpable absurdity is very likely to be mingled with these fresh impressions; but they almost always deserve to be considered and pursued a little. Nothing more certainly quashes the intellect than to treat the error or absurdity with banter, or a frown. I myself retain a lively recollection of a very different mode of dealing with a boy's first thoughts, upon points of science; and I know how much the early working of the mind may be aided, and its originality may be cherished, by the bland, patient, indefatigable intelligence of a well informed father, who was not only willing and able at all

times to answer a question and solve a difficulty; but who had a peculiar tact of putting himself into a child's mental position, or point of view, so as to meet and satisfy the real difficulty with which he was labouring. An exact attention to these and such like evolutions of individual minds is the prerogative of home education; and we should be prepared to make the most of our opportunity.

Again I must advert, in this connexion, to the inestimable advantages afforded by a country residence, for diverting, in the most healthful manner, a too sensitive meditative humour, by active and agreeable occupations, and by simple exhilarating amusements. In the country we have always at hand natural remedies for the natural ailments of the mind. And then, as to what is merely intellectual, a constant and familiar converse with nature in her forms and in her operations, rather than with books of science, and artificial modes of instruction, leads the mind on the path where real difficulties are clear of adventitious obscurities, and are not darkened by words without knowledge.

Some minds, among the young, look at nature chiefly as a spectacle, and others chiefly as a contrivance. Some are most sensitive in the tastes and imagination; others in the reason; but in either case, with the garden, the fields, the forest, the rough hill side, or broad heath,

before us and about us, a happy vigorous employment may be presented to each newly-bursting faculty, and an attractive object found, wherewith to lead the mind off from subjects that are unprofitable or dangerous.

CHAPTER VI.

THE THIRD PERIOD OF EARLY LIFE, AND CONCLUDING TERM OF HOME EDUCATION.

THE practical difference between a public and a private education becomes broadly apparent about the time when boyhood succeeds to childhood. In their twelfth year children who have been reared beneath the paternal roof, and who have lived in the society of well-informed adults, are found to be very unlike, in tastes and habits, to those of the same standing who have already passed several years at school.—They will be less childish, and more childlike: they will, in a sense, be too adult, and too infantile: there is an advantage they will possess, and a disadvantage also; and we must be prepared at once to avail ourselves to the utmost of the former, and to find means for obviating, as far as possible, the latter.

I do not profess to strike the balance between the two methods; but simply keeping my eye

fixed upon that which I have adopted, and which I undertake to treat of, shall labour to point out the means of doing the best with it.

Home education, when it reaches its later stages, is not unlikely to present an apparent, and perhaps to some extent, a real inconsistency, with the leading principle professed in this volume —I mean that of a retarded development of the mind; for it may often be found that intelligent children, who have been constantly the companions of well-informed parents, and who may have been their father's assistants in literary or scientific pursuits, have become, notwithstanding his intentions to the contrary, far more mature in tastes and habits than they would have been had they passed the same years at school. If however the home system be in all respects judiciously conducted—if animal health and hilarity are maintained by the proper means, and if severe exactions in the course of study are scrupulously avoided, few if any of the ill consequences of this early ripening of the mind will have been incurred. And yet I will not say that a father may not sometimes wish to see his sons a little more boyish than they probably will be, if they have conversed much more with him, than with their peers.

The schoolboy of fourteen is what his comrades have made him; but the home-bred boy is what his parents have made him; and there is a balance of advantages between the two kinds of

character. The former is the creature of instantaneous and vehement impulses, and he acts under the guidance, not of individual reason, but of conventional habits. Whatever may be his acquirements, and whatever the assumed manliness of his bearing, he is the child still; and is more sensual, more frivolous, and more wilful than a home-bred boy five years younger than himself. In relation however to the engagements of common life he is not ill prepared to brunt the world, as it is. He is not too thoughtful, or too wise, or too nice in his tastes, or too considerate of the feelings of others, to take up the rough work of professional or commercial life; and he is saved the torture which those must endure who enter upon the broad paths of business with their own individual sense of right and wrong, and their own feelings, all about them.

To secure, for the home-bred, a portion of the same advantages, it is certain that, in approaching the later period of early life, some companionship, out of the family, must be admitted, even at a little risk to that simplicity which hitherto has been so anxiously preserved. And it will also be indispensable, in a home-trained family, I mean for boys, as a compensation for what is gained of spirit and audacity at school, to court hardihood and courage, and to cherish as well animal insensibility (we want the word *insensitiveness)* and self-possession, by arduous field

amusements, and—if they can be had, by enterprizes in the forest, or among the mountains. Who could wish to rear, at home, slender, pallid, aspen-leaf youths, content to be never far from their mamma's protection, always duly regardful of every species of possible peril, and well pleased, day after day, to take a quiet ramble, carrying the umbrella for their sisters! We must secure something more than this, or renounce home education altogether for boys.

That higher degree of discretion and considerateness which is likely to attach to children trained at home, may very well find an object, and so be prevented from lowering, as it otherwise will, the youthful spirits, if there be the opportunity of employing them in some really serviceable manner. This is easily done with girls; and whatever certainty parents may have of securing future competence, or even affluence for their children, there can be no doubt—at least I have none, of the desirableness, in regard as well to the physical health as to the moral sentiments, and even the finest intellectual tastes, of a practical concernment with domestic duties. A substantial feminine industry, and a manual acquaintance with the routine of family comfort, gives solidity to the muscular system, and solidity also to the judgment:—it dispels romantic and morbid sensitiveness; inspires personal independence; dismisses a thousand artificial solicitudes; breaks through sickly selfishness;

and in a word, gives a tranquil consistency to the mind, on the basis of which all the virtues and graces of the female character may securely rest.

As to boys, if agricultural affairs, larger or smaller, are an appendage of the establishment —if there be commercial interests to be looked to —if out-of-door works are carrying on, and accounts are to be kept, great benefits will be secured by entrusting certain well defined duties —certain regularly returning and real engagements, to a youth, from the earliest time at which he appears, as to body and mind, capable of sustaining any such responsibility. Occupations of this sort are intended to give employment to that higher degree of thoughtfulness and discretion which is likely to belong to a boy who is his father's companion. At the same time the alternation of these employments with intellectual pursuits has the most favourable influence upon the mind in preserving its elasticity, and in increasing its free force.

I think too, and speak not without a regard to facts, that great advantages, advantages of more kinds than one, accrue from that knowledge of his father's affairs which a son, so employed in managing the details of them, is likely to obtain. An ingenuous and well-principled youth —confided in by his father, acquires steadiness of purpose and discretion, together with moderated views, which will be highly conducive to his future welfare.

It has been remarked by Rousseau that the period between the twelfth and the seventeenth years is the only time when man is absolutely happy; inasmuch as it is then only that his forces of body and mind much exceed his desires. At least it is certain that, during this period, there is a surplus force available, greater in proportion to the calls made upon it, than at any other season of life. In large schools, where severe mental exercises are exacted, and where the most vivid excitements are afforded out of class, the superfluous energy of body and mind is pretty well occupied; but at home, provision must be made for giving scope to the same superabundant power, which else either dwindles, or finds some mischievous outlet. I have already referred to the desirableness of field exercises, and such as are of an arduous sort, in the management of a home-trained family; and as to the overflowing energy of the mind, during this same period, we must, in the place of the severely exacted exercises of school, devise labours, some samples of which will hereafter be given, such as shall not merely engage the mental force, but such as shall form into a habit the serious feeling of having to achieve a task, peremptorily demanded at a certain time.

The difficulty at home, under intelligent management, is not that of imparting any desired amount of information, or of awakening the faculties, or of giving them a high degree of

activity; all which may easily be done; but the point of trial for our domestic system, let it be confessed, is the forming the habit of STRENUOUS CONTINUED LABOUR, impelled by motives that are seen and felt to be IRRESISTIBLE. The very same task which costs the mind the most grievous struggles between its inclination to desist and its wish to proceed, if the motive be a little loose or questionable—this task, not a whit abated, is performed with alacrity and ease, when once it is looked at as in no way possible to be evaded. The sense of absolute necessity is that which makes all things easy—converting the impossible into the practicable.

Merely looking therefore at the learner's own present comfort, we should wish him, at times at least, to come under the stern law of necessity in his mental exercises. But this is not all, for it is certain that the business of life, and especially in some of the professions, demands a power of vigorous, long-continued application to the most irksome labours; nor are the highest offices exempt from more or less of what must be called drudgery. A man whose faculty of attention is speedily exhausted, who resents steady application to dry details, and who finds frivolous pretexts for shifting upon others every strenuous mental effort, such a man is good for nothing, but to receive his rents from the trusty hands of an agent; or to sign his name and get his dividends twice a year.

A very different issue of our educational course is here kept in view ; and therefore, over and beyond the conveyance of what is to be acquired, and which may be conveyed without any very painful assiduity, besides this, the power of keeping his footing with others on the treadmill of mental labour, must be acquired by the learner. After what has already been said on the subject, it can hardly be needful to add a caution, not to go beyond the point at which the animal system begins to sustain real injury by continued application.

If a well trained and intelligent youth of fifteen could but be put at once into possession of the detailed practical knowledge—the experience, which in fact is only to be slowly acquired, he would often have the advantage of his teacher, in readiness and rectitude of judgment, upon subjects any way connected with those vivid interests that attach men to this side, or to that, of party controversies. And this advantage would arise not merely from the clear, unimpaired freshness of the faculties ; but from the freedom of the mind from the strong, though unconscious influence of personal, and gradually formed, ill habits of reasoning. An ingenuous mind is indeed conscious of the presence and operation of certain well defined motives for thinking, or of professing to think, so and so ; and probably guards itself against its known

partialities; but how few are at all aware of the number and the force of those noiseless misjudgments that actually overrule their every mental operation! The process of thinking, or reasoning, as often conducted, might be compared to the process of calculating astronomical events, when the data are taken, unquestioned, from printed tables:—the operation is, let us grant, correctly performed, and the result would be true, if it were not, alas! that this authorized vade-mecum —this book of Tables, abounds with errors of the press: all therefore is set wrong.

Now a teacher of philosophical temper, who is aware, not merely of his own party bias (with which he is careful not to infect his pupil) but of the general fact that the mind, as it advances, becomes unconsciously subject to certain fallacious modes of reasoning, will not disdain, while assuming to guide the minds committed to his care, to watch and wait for their uncontrolled workings, when the requisite materials of thought are placed before them. A teacher may, in this way, get a clue to his own constitutional errors of calculation, and may discover in the spontaneous reasonings of a fresh mind, the genuine logic, from which he has himself unknowingly swerved.

But at any rate the pellucid ingenuousness of young persons, who (unless miserably infected by sectarian sentiments) have no predilections, should be attentively listened to, and delicately

treated. A mind may be injured beyond remedy, which is roughly dealt with, or acrimoniously rebuked, in any instance of its not immediately falling in with a teacher's opinions. To the young mind, the broad fields of thought are as yet all unfenced; nor has it learned to notice enclosures, or to respect rights of way, or manorial prerogatives:—earth is as open as air and sky.

We are not here excusing a lawlessness of thought in the young, disdainful of authority; nor are wishing to encourage unfixed mental habits; but are only adverting to a fact, not unlikely to be overlooked—that when discrepancies arise between the teacher and the pupil, a question may fairly be put to himself by the former, whether the difference does not result, in part, from a collision between the unwarped reason of the youth, and the unconsciously unsound logic of the teacher: a moment's pause, on his part, might enable him, as well to correct a personal error, as to save his pupil an unmerited reproof.

If there be room to hope that mankind will in a coming age reach a more advanced position on the road of genuine wisdom than has as yet been attained, so desirable an event is likely to be favoured by a greater care, on the part of teachers, in managing the early spontaneous expansion of the reasoning faculty. Too often, the worst prejudices are authoritatively forced upon

the young, which the feeble minded retain through life as shackles; but which the strong resentfully throw off, to the peril of all faith and principle.

An intelligent agent is capable of liberty only so far as he possesses some excess of force, available at his discretion. But we have just said that this excess is proportionately greater during the years of adolescence, than at any other time of life: the capability of liberty therefore must be so much the greater; and the question is — How far it may be safely indulged. At school, absolute restraint, and absolute liberty, or something like it, take their turns in the course of every day. But at home, the two elements are mingled more, and are together spread over all hours; the greater range of discretion being allowed during seasons of restraint; and rather more restraint being imposed during intervals of liberty. Yet this intermixture would in itself tend to break down a little the force of the mind, or to render the habits indefinite, if it were not compensated by eliciting some higher motives of conduct; such as may render it safe to grant to the home-bred youth a much wider scope than is allowed to the schoolboy of the same standing. There must be more license, counterpoised by more principle; and thus a degree of steadiness of character may be secured, which is to come in the place of the schoolboy's rude energy. At home we cannot have precisely the same results

as are obtained at school, but must seek equivalents; and we may often command what is of higher value.

Difficulties such as these, scarcely attach to female education; for a mother, possessed of the qualities fitting her to superintend that of her daughters, is rarely at a loss in communicating to them such principles as will make it safe to leave them in the enjoyment of as much personal liberty as a daughter at home can wish for.

But a father finds it otherwise with his sons, after they reach their teens; for the vastly higher energy, animal and mental, of the male temperament, and for which adequate employment is not always available, must be disciplined, not broken down, by bringing the moral sense into fuller operation. A home-bred youth, not cowed or pinned to the sleeve, needs to be inspired with far more sentiment than would be necessary for him at school. And if these ends can actually be secured, that is to say, if youthful vigour and animation can be preserved unimpaired, along with feeling and principle enough to guarantee mild and discreet conduct, we then gain a real advantage.

Our purpose, in this respect, will be much facilitated if the tastes of a youth are such as impel him to enter with eagerness into literary or scientific pursuits, as his father's companion and assistant. The genuine zest of intellectual labour being generated and kept in activity, this bond of fellowship between a father and a son,

on the ground of philosophy or learning, may easily be made to extend its influence on all sides, and thus enable the former the more readily to govern the spirit of the latter. The bare force of paternal authority does not suffice for this end; for if it ensure specious obedience only, little good is done;—if actual obedience, then there is a probability that the vivacity of the mind has been too much broken down by the means used for giving effect to so strict a sort of government. The same result is attained in a happier manner when there can be realized, between a father and his sons, the spirit and warmth of intellectual companionship.

I have already said that, as early as the eleventh year, or at some time during the middle period of the educational course, enough may ordinarily be known of children's natural endowments to enable a parent to assign them, severally, to one or the other of the two classes —the intellectual, who are to receive an elaborate and extended mental culture; or the unintellectual, who are to be fitted for business, or business-like engagements, and whose education, of whatever sort, may well be brought to a close at an early age.

But about the fourteenth year, it may generally be practicable (in relation to those who are destined to a professional course) to determine the particular line that a youth is to pursue. Now

if this can be done, two methods of mental treatment appear to be proper, the one of which is very obvious, and would hardly need to be specified: the other might not perhaps occur to the teacher, or might be discarded as not consistent with the former. What I mean is, that if the professional destination of a youth is ascertained, then something may be done before professional studies are entered upon, to familiarize them to him a little. Indeed it is probable that, if the choice of a profession has been made on the ground of a youth's personal taste and peculiar talent, he will himself court the studies that bear upon the object of his preference. On this point there can be no need to enlarge.

But while indulgence, to some extent, may be allowed to a boy's predilections for particular pursuits, there is another point, of some importance, to be kept in view during the year or two that may elapse after a profession has been chosen, and until the college course is commenced; and it is, to engage the mind with studies that may serve as the correctives of professional pursuits, and which are likely to be discarded, or held in low esteem, when once the professional enthusiasm is kindled. It is not intended that a youth should be compelled to addict himself to studies altogether distasteful to him, or which he has no ability to cope with. To preclude a misunderstanding on this point, I will offer an exemplification of my meaning.

Let it then be premised that a home education supposes always the diffusion of that liberal and expansive intelligence in a family which will have the effect of excluding narrow tastes; and so, of bringing all minds, whatever may be their particular preferences, into agreeable sociality with all the muses, and all the sciences. This being supposed, then if, for example, the legal profession were in prospect, a teacher need not be told that his pupil should become conversant with history; or that he should be exercised in the ready use of the faculties of abstraction, analysis, analogy, and ratiocination; or that he should be practised in a fluent, pointed, extemporaneous utterance of his thoughts:—all this is obvious enough; but beyond this, we ought to look out for pursuits the tendency of which will be to counteract the ill influence of the legal profession upon the mind and the moral sentiments. With this view peculiar attention should be given (let no offence be taken at the suggestion) to that high moral training which brings the universally applicable logic of inflexible rectitude to bear upon the technical logic of special pleading to carry a point. History, read under a proper guidance, and especially those more elaborate specimens of modern history wherein the real motives and private character of public men are exposed in their confidential letters—this sort of historical memoirs, affords opportunities for exercising the moral sense in discriminating between

the base and the noble, the cunning and the wise, the specious and the great, in public conduct. What we are aiming at is to train the moral taste, not merely as applicable generally to ordinary conduct in a common lot; but as adapted to the trying and complicated circumstances wherein good and evil are commingled, so often, in the course of public life. Besides those sacred principles of morality which character should rest upon, there is a specific feeling of the just and fair, applicable to the difficult occasions of a professional career, and destitute of which, homely honesty and virtue get, unawares, into many a wrong position, and are tripped up. That study of history then, which the lawyer needs, as a lawyer, is one thing; but that study of it which the man needs, who is to endure the ordeal of the legal profession, is quite another.

Again, it is desirable to provide against the mental shortsightedness not seldom induced by legal studies and practice; or in other words, to impart a more philosophic expansiveness of understanding, as counteractive of the habit of holding to what is merely technical, and of refusing to look at what is broad or abstract. It is usual to recommend mathematical studies as preparatory to a legal education, under the idea that these pursuits afford a good training to the reasoning faculty. But I am inclined to question whether the one species of logic—the mathematical, be indeed a fit preparation for the other

—the legal, differing as do the two in their very principles: but waiving this question, it would appear that Natural Philosophy, and especially as it is now prosecuted, affords precisely the sort of intellectual preparation we need for preventing what might be called the *anchylosis* of the faculties, or that fixedness of the reason which makes the mind the slave of instances, of precedents, and of technical verbosities. Modern physical science is as regardful of single instances as law itself can be; but it tends always upward to the universal and the abstract; and hence it affords so good a discipline to the higher reason.

With a different immediate object, and yet coming under the same general principle of providing against professional distortions of the mind, it is very desirable to cherish the imaginative tastes in those who are to addict themselves to studies utterly devoid, for the most part, of intrinsic charms, and likely therefore to parch the intellect. For it must be remembered that it is through the medium of these tastes that access is had to some of the noblest emotions; and by these often that such emotions are kept in vitality.

It would lead us too far to pursue the illustration of the point in hand, as related to the other professions: indeed the subject is in itself so important, and has been so little adverted to, that it may claim hereafter a separate consideration. How incalculable, for instance, and how beneficial, might be the consequences of an early

training of youth, destined to the exercise of the christian ministry, were it conducted on the principle of furnishing the mind with habits counteractive of certain tendencies of the clerical temper which diminish in fact the happy influence of the most momentous of all offices, when brought to bear upon human nature as it is.

Whatever relates, in a specific manner, to the acquirements which should be made, and to the training which should be passed through, during the latter period of Home education, will find its place in the following chapters, or in another volume. One preliminary topic only now remains to engage our attention, and that is a consideration of some of those original diversities of mental conformation which demand to be regarded in adapting courses of study to individual tastes and talents.

CHAPTER VII.

SOME DIVERSITIES OF MENTAL CONFORMATION CONSIDERED IN RELATION TO METHODS OF CULTURE.

THE prerogative of Home Education is the opportunity it affords for adapting methods of culture to individual diversities of taste and power: the discrimination therefore of such natural differences properly belongs to our general subject.

In attempting the discrimination of intellectual character, two errors are to be avoided; the first is that of a too hasty, or a too confident decision in relation to a child's general ability, or particular turn; for besides a parent's liability to err, the minds of children undergo, in some instances, very remarkable revolutions, such as totally belie the estimate that might have been formed of them at an early period. Our judgment should be held open to correction from year to year. The second error is that of being

too ready to allow our plans to be overruled by the supposed ability, or particular tastes, or the assumed incapacity of a child. If too pliable, we may cherish faults, instead of correcting them. While some teachers blindly and despotically drive all minds forward on the same path, and compel all to move at the same pace, others are infirmly sensitive to the imagined inability of children; or lend an ear too readily to their likings and mislikings, until at length nothing can be gone on with, and nothing is found altogether suited to the "natural tastes" of the squeamish little folks. The pitiless discipline of school is much to be preferred to any such compliant mode of proceeding.

It will be convenient to consider the various instances of mental conformation, most needful to be regarded in our modes of culture, under the two general classes of—Those which must be specified on account of some apparent deficiency of intellectual structure; and, Those which claim regard on account of some peculiar talent; or a general superiority of understanding.

For the first then of these two classes. The instances most easily discriminated are those in which a morbid delicacy of constitution impairs the power of attention, and produces a wayward listlessness, and general inability to hold to any train of ideas, beyond a few moments. These cases are not likely to be mistaken; nor can there be a question as to the course to be pur-

sued, which should aim at nothing but the corroboration of the animal economy. Ill health, whether accidental or constitutional, never fails to make itself apparent in other modes than in the mere indisposition to learn; and therefore a reluctance to learn, falsely excused on the plea of ill health, may be readily detected. Real disease is sure to be indicated by want of appetite, deficient muscular substance, unquiet sleep, and fitful animal spirits. The treatment of such cases does not appertain to our subject. Need it be said that there can be no greater cruelty than that of working a brain poorly supplied with blood, and wanting in nervous energy!

And yet there is much that may be done, even with a sickly child, in keeping the mind alive—tasks and books out of the question. Sickliness, intellectually considered, is infancy protracted; and the mental treatment proper to a healthy child of three or four years old, is nearly what must be resorted to with an infirm one of ten or twelve. A child must be labouring under active disease who will not listen to desultory, yet instructive conversation, or to a little reading. Those ingenious devices too, for conveying instruction, which we should discard generally, may be fairly introduced in a case such as we are supposing; and the eye and the hand may be occupied, while the mind is unconsciously fed.

Neither the classics, nor the mathematics, can to any good purpose be pursued, if the mind be

at all infirm in consequence of the physical condition. But one or more of the modern languages, comparatively easy as they are, and fraught too with entertainment, may readily be conveyed to a sickly child, in morsels, and colloquially. No Grammar, no Dictionary, should or need be put into the hand; for without either a teacher, qualified to do it, may make a child familiar with French, Italian, and Spanish.

The rule to be kept in mind, in the treatment of an infirm child, is, that it is the power of attention, rather than the general intelligence, that is impaired by ill health. Whatever therefore, in the usual range of study, is susceptible of comminution—whatever may be imparted a bit at a time, may be taught to those who ought to be exempted from continued application. Thus, history, geography, natural history, especially, and the demonstrable parts of natural philosophy, may, by a proper method, be instilled without hazard either to mind or body. If by any such modes of accommodation the tastes can be kept alive, not only will the miseries of listless inanity be prevented, but a preparation will be made against a time, not unlikely to arrive, when much more may be attempted. It is not unusual for the morbid instability of childhood to wear off about the fourteenth year; or the sensitiveness which has belonged to the teens, may disappear at twenty; and a late education be then carried on.

The above-named case of physical infirmity, as is manifest, may include many varieties of mental conformation, which will engage a parent's more particular attention; and the same may be said of the class next to be mentioned, namely, that of children who must be treated as decisively non-intellectual, and who yet, by a well adapted course of study, may with ease be rescued from the inanity, frivolity, and perhaps grossness, that would attach to them under a common school discipline. I have already more than once spoken of the cruelty of forcing a classical education (or the appearance of it, for the substance is utterly out of the question) upon minds of a thoroughly ordinary stamp. No practical error more egregious is perhaps to be met with in the common conduct of mankind, than this. Youths wronged at school in this manner, but yet not wanting in plain good sense, are seen to expel resentfully from their memories every trace of the ignominy and torment they have been subjected to, the instant they find themselves fairly out of the reach of the cane and ferula.

But there is a world of things that may be learned, and relished too by children of very ordinary minds. Is it so that Horace, Virgil, and Homer are the door-keepers of the temple of knowledge?—surely not; and in fact, with or without the leave of these worthies, we may find an entrance for our numerous class of the NON-INTELLECTUAL. I am firmly persuaded

that the general intelligence of the community would be very visibly increased, in the course of a few years, if the principle were everywhere adopted of saving all the time squandered upon the bootless attempt to teach the classics to common minded boys; and if the same precious months and years were rationally employed in conveying the sort of education which such would gladly and gratefully accept. A revolution such as this, is not likely to take place in our great schools; but I should think myself happy, could I induce any parents to adopt the determination of not allowing their sons (coming under this class) to be made the victims of an old but barbarous error. It may be long before we are saved the pitiful spectacle of seeing common minds forced in troops over the burning coals of a classical course; but shall not a father's good sense and paternal compassion rescue his own children from the miseries attaching to this worship of the gods of Greece and Rome?

This ill considered usage props itself, a good deal, upon the vulgar adage, that—"What man has done, man may do." Yes, man in the abstract, may do whatever man in the abstract, has done. But is it true that whatever William or Francis has accomplished, John and Samuel, by sufficient endeavours, may also achieve? I presume that none who are conversant with human nature need any refutation to be advanced of such a supposi-

tion. In aiding nature we must ever be willing to yield to the plain indication of her intentions; nor are there any more legible or more unalterable than those which declare what each mind is fit for, and what every man may reasonably attempt.

And let it be allowed me, in this place, to remind the too zealous advocates of classical learning, that the actual effect of their endeavours so to extend this system of training, is to send forth into society, every year, many who retain through life a vivid resentment of the wrong that was done them at school, and who, instead of being indifferent spectators of the controversy now agitated, and likely to be still further prosecuted on this very question, are prompt to join in the outcry against latin and greek, in terms of embittered scorn. But these same persons, had they been wisely treated at school, might have ranged themselves on the other side; and have given their useful support to methods which they would readily admit to be proper to some, though not to all: good sense, not prejudiced by unhappy recollections, would secure a vote from such persons in favour of learned institutions. In fact it is not uncommon to meet with men of no education, and of limited intelligence, who yet anxiously endeavour to secure a classical education for a clever son:—they do not despise learning, if they have not been made to quarrel with it personally in early life. Thus it is that

some who have risen to competency or opulence from the lowest ranks, and who can barely write their names, are seen to be the liberal supporters of educational institutions; while those of the same intellectual stamp, who have themselves endured the discipline of a grammar school, speak with acrid contempt of classical learning.

On some accounts it may be well, as I have already said, to send non-intellectual children to school; but really so long as it continues to be the practice to cram all with the fragments of dead men's bones (for it is the bones only of classical literature that can be given to those who have no taste) there may be good reason for retaining such at home.

If it be supposed then that parents, exercising a sound discretion, and being convinced that their children are not naturally endowed with intellectual tastes, have resolved to exclude the learned languages from their system of education; yet it will not follow that one or two of the modern languages may not be taught in such a family. What has been already said of the infirm, may be said also of the unintelligent, in this respect. Beside the comparative accessibility of the European languages, and the facilities for teaching them in a colloquial method, they may easily be made attractive to almost the dullest minds. From the entire mass of ancient literature hardly the quantity of five pages can be gleaned of a sort which will entertain a boy

of dull intellect; but from the literature of France, Spain, Italy, and Germany, it is easy to collect abundant materials, such as will stimulate the heaviest minds.

Or if the languages, altogether, are relinquished as unattainable, or as not likely to be useful, there are means in abundance, suited to the purpose of quickening inert faculties, and of excluding frivolous or sensual tastes. If there be any manipulative or operative tact, let the laboratory be resorted to—if not to philosophize, to transmute, to smelt, to crystallize, to sublimate, to inflate balloons, and to ply electric batteries. Or if there be any faculty of observation, and any industry of collection, we may set a going the museum of natural history—the hortus siccus, and the collection of geological specimens. If there be a constructive and mechanical turn, we have at our command the various branches of the applicate sciences; and one of the best pursuits in the case supposed—land-surveying, mensuration, and the art of the civil engineer. I venture to say that it is hardly an instance in a hundred in which, if a boy is not absolutely mindless, he may not be brought to display a degree of zest in pursuing some one or more of these tangible and intelligible sciences. In most cases, if we will but condescend to try the proper means, the sluggish faculties may be at length brought into play, until not merely a fair amount of general information has been imparted, but

the individual has been, if one might use the expression, put into amicable communication with the world of mind, and for ever rescued from the ignominy of ignorance. A kindly, animated, condescending treatment—versatile in its measures, and quick to catch any indications of natural taste, may work wonders with common minds. Home education might perhaps win its brightest honours on this very ground.

The actual want of mind is to be carefully discriminated from the less usual case of mind dormant;—the early appearances being sometimes nearly the same. It may be thought that little danger is incurred on this ground, inasmuch as it may be supposed that a latent faculty will not fail to evolve itself in due season. But it is not quite certain that it always does so; and on the contrary, continued discouragements, and injudicious treatment may actually crush extraordinary powers in the bud. The instances on record, of deep-seated genius, not at all indicated until a late period, have been chiefly of two kinds, namely, the poetic, and the analytic, or metaphysical. In the former case the indications are a melancholy waywardness of disposition, a deficiency of the gregarious sentiment, and an inability to move in trammels, or to hold a place in class. In the latter case there is likely to appear a peculiar slowness of apprehension, or absolute inability to admit knowledge in the form in which it is presented by the

teacher; while, in his own way, the boy of occult power, takes great strides on the path of abstraction. He will moreover be wanting in that sort of technical memory which, beyond any other talent, is the means of promotion at school. But a philosophic eye will perceive, in the first-named instance, that the boy of whom it is contemptuously reported that "really nothing can be done with him;" or, "you are welcome to try your skill upon him," is in fact making himself happy in a world of his own creation, and has some whimsical pursuit which derives its charm entirely from intellectual associations; and in the latter, although there be an averseness to the details of learning, such as is an effectual obstacle to progress with others, there is no indisposition to intellectual occupations of some peculiar sort.

Again; a degree of discrimination more likely to be exercised at home than at school, is required in treating a class of minds peculiarly constituted in regard to the effect produced upon them by competition. Exciting as this feeling is to most, there are some—and some of fine intellectual temperament, whom it utterly depresses, so that they recoil and collapse the moment they are conscious of rivalry. Such minds, under common treatment, suffer a cruel disadvantage, and pass down with ignominy to a low place, although, if their intellectual conformation had qut been understood, they might have left many

in the rear. An extreme sensitiveness and delicacy, or an inability to move faster than at a fixed rate, may be the cause of this peculiarity; or in rare instances it may result from an unusual grasp of mind, such as impels the subject of it to question, or to reject, the customary and perhaps inaccurate phrases of school exercises, and to be searching for a better expression of the dimly-perceived truth, which others thoughtlessly enunciate. Instances of this kind demand peculiar regard.

I must however return for a moment to the case of those who are consigned to the class of unintellectual mediocrity, and to whom a teacher may be tempted to pay too little attention; and must endeavour to press on his recollection the very important fact that these very minds, undistinguished as they may be in their early course by any activity of faculty, or any propension toward learning, may and probably will, many of them, be found hereafter to be gifted with a soundness of judgment, a steadiness of intention, a tact in the management of affairs, an industry, or a courage of principle, such as, in relation to the most valuable ends of life, will give them immensely the advantage over their more intellectual comrades. If the history of a class of boys were pursued for twenty years after the time when they left school together, how often would it be found that the dull, and the inapplicable, and the ungifted, had

become desirably established in prosperous positions, and were commanding the respect of their circles, while the EMERITI, with perhaps a single exception, had poorly played their cards, and had very slenderly realized the bright hopes of teachers and parents. In truth some of the most desirable and productive qualities of the mind, and especially such as belong to the judgment, are seldom if ever developed at an early period; and they may remain embedded in the character without betraying themselves by any sort of intellectual activity or taste. But if we are to regard, either the welfare of the individual, or the benefit of the community, can we think ourselves at liberty, as teachers, to consign to a slovenly mode of treatment the entire class of the unintellectual? There can be no doubt that the great interests of society suffer incalculably in consequence of the inappropriate sort of culture that is bestowed in most schools upon common-minded boys; as well as from the supercilious neglect of them by their teachers, who will not trouble themselves to do any thing (to use a proverbial phrase) but drive the nail that will go. The teacher aims to get credit:—he can get it only upon the few in his class who are gifted:—all the rest are left to their fate. And yet these neglected ones, much more probably than their brilliant comrades are, at the end of ten or fifteen years, to stand in the most important positions, and to be the holders and

managers of the substantial interests of the community.

In treating, as I am doing in the present work, of the culture of the mind, it is unavoidable to pursue a method which implies rather more than a mediocrity of intelligence in those who are to be the subjects of it; but I could be well pleased to labour in the humbler, though useful office, of digesting an entirely distinct scheme of education, expressly adapted to those who give no early indication of intelligence. Such a system, well concerted, and patiently and vigorously put in practice, would not fail to produce the most striking effects upon the tone of society; and its result would be, not to diminish the proper influence of eminently gifted minds, as if the many might be put on a par with the few; but on the contrary, to enhance that influence, to facilitate its exercise, and to extend very much the sphere within which it might take effect. It is precisely the neglected education of the unintelligent mass of minds which makes the progress of truth always so slow, and renders it liable to so many reverses.

Only let teachers remember that, though ungifted minds are incapable of being forced into a state of intellectual activity, they may with great ease be furnished with an ample amount of that sort of knowledge which is likely hereafter to be useful to them. There are few minds indeed that may not be made familiarly conversant with what-

ever, in philosophy or nature, is visible and palpable, or which may be distinctly presented to the conceptive faculty;—and how gratefully would this sort of culture be thought of in after life by many who, driven as they have been, by the birch and cane through the metres of Horace, remember their school days very much in the same manner as a man does who has made his escape from an Algerine galley.

But I proceed to suggest a hint or two relative to the discrimination and treatment of those who come under our second general class, as giving some indication of superior intelligence. And it will not be forgotten that, while the intention of MORAL TREATMENT is always to reduce individual peculiarities of temper nearly to an uniformity; or at least to bring them to an approximation to the one standard of truth and goodness, it may, on the contrary, be taken as the rule of INTELLECTUAL TREATMENT to enhance rather than to abate the peculiar mental character, and to give the highest possible advantage to whatever faculty may appear to have been bestowed on the mind as its personal distinction. We study peculiarities of temper in order that we may know how to mitigate, to disperse, to quell, what marks the individual: but we study peculiarities of mind that we may, in the best manner, add the benefit of culture to the endowments of nature. There may, indeed,

be those who would rather see their children mildly shine in the general light of intelligence, evenly diffused, than rendered conspicuous by a single brilliant talent: but it is a question whether there be not an obligation to the community, if not to the individual, which demands that extraordinary powers should be definitely devoted to particular services.

It is very far from being my present purpose to attempt a general discrimination of intellectual character. All we have to do with, in relation to methods of culture, are some few distinctions that seem to demand an adaptation of the process of education. It would be impracticable, or not very useful if practicable, to mark the nicer shades of mental diversity: parents must use their best discernment in studying the structure of single minds in their own families.

Decisive intellectuality of taste, and superior mental power, whether considered in relation to the training that may be proper to it, or to the future exercise of it, by the adult, is, speaking broadly, either of the executive, the philosophic, or the imaginative kind; and a word or two in reference to each, will satisfy our immediate purpose. Ample materials might indeed be found for a treatise on this branch of practical education—the treatment and discrimination of the different orders of minds, but in this place a cursory allusion to the subject is all that can be admitted.

By the phrase—EXECUTIVE mental superiority, I intend something more than that general ability or aptness for the transaction of affairs which renders a man successful in commercial life, and which, with other necessary qualities, ensures him affluence or competency. What I mean is a species of intellectual power which has an affinity with the most stirring and ennobling motives of our nature, and which is likely to seek its objects in a sphere above that of pecuniary interests. This order of mental power is, in fact, a combination of many excellencies, for it includes that ready apprehension of the bearings of things which belongs to the mere man of business, and without which no one can succeed in the management of any affairs, along with so much, at least, of the philosophic faculty as serves to elevate the subject of it above the level of vulgar motives, expanding the views, bringing the mind into correspondence with abstract and universal principles, and enabling it to adapt general principles to those sudden and unusual occasions when inferior minds are soon bewildered, or go wrong. Again; this species of superiority implies more than a spice of the imaginative element, without which there can be no genius, no greatness, no richness or freedom, no soul, no appliancy of talents, no harmony of purposes, no energetic hold of generous sentiments. A mind thus distinguished (and perhaps the prevalence of a better system of education would make it appear

that such are not so rare as we have been used to think) such a mind is clearly destined for public life, and the care of it is no light responsibility for the teacher or parent.

The facts on record whence an opinion must be drawn, lead us to believe that, while the genius of the poet or the philosopher may long lie unsuspected, and the subject of it actually occupy a place below the line of mediocrity, it is otherwise with the class of minds we are now speaking of, which, in all instances now occurring to my recollection, have displayed their superiority at an early age. Whatever wilfulness or irregularity may have belonged, in such cases, to the youth—the boy and the child has predicted, in an unquestionable tone, his future greatness. A clear and happy comprehension of whatever is offered in the ordinary course of study—a steady spontaneous perseverance in achieving whatever has once presented itself to the mind as desirable, a solidity of judgment, some years in advance of the actual age, a disposition to generalize, in relation to the great interests of mankind, and, as a particular trait, a passion for history;—such are likely to be the indications of this order of mind.

In speaking of the system of culture proper for such a mind, another of its characteristics must be mentioned—namely, the disposition and the ability, in some degree, to lead the way in its own education. I do not intend a contumacious

temper, resisting lawful authority, and spurning reasonable control; for, on the contrary, mild docility is more likely to belong to faculties of a high order; but there will be at once such a determination towards study as renders external incentives unnecessary—so quick a perception of what it is which is to be done and acquired, and especially so much tendency toward whatever is most important among the several objects of study, as will supersede almost any plans laid down by the teacher. An eminently superior mind, whatever may be its amiable compliance with the wishes or advices of others, will, from the first to the last, be the author of its own course. The part of the teacher will be chiefly that of supplying those incidental aids which none can dispense with, and of furnishing the mere materials and apparatus of study.

This kind of superiority admits of indefinite degrees, from the greatness which founds or governs empires, to the ability that takes the lead on a bench of justices of the peace: but the early indications of it, whether in its higher or lower degrees, are still—a quick apprehension of things complicated, an unusual ripeness of judgment, and a self-determining energy, intellectual and moral. And let it be observed that the maturity or correctness of judgment of which we here speak, is something altogether distinct from, and independent of, logical acuteness, or the acquired power of constructing an argument.

Sound and vigorous understandings do not reach truth by threading inferences, in syllogistic style; nor could a greater injury be done to a youth of powerful intellect than the training him to reason in a scholastic manner. What is wanted to give the fullest advantage to a very superior mind is simply to put it in possession of copious materials, on which to act: its method of acting will be its own.

Our second general class of gifted minds includes more varieties, and as the cases are of less rare occurrence, so they adapt themselves more readily to the ordinary course of education. Minds of the PHILOSOPHIC cast, as distinguished from those last mentioned, whose characteristics are symmetry of faculty, and power, are very often destitute of the qualities which give a man a decisive advantage over all with whom he has to do: in truth philosophic minds, though distinguished on particular ground, often take their station below the general level, in other respects: the eminence is intellectual merely, and it has its sphere. Its early indications are not obscure; —they are such as some strong specific taste— the insatiable thirst of knowledge, whether general or particular—an aptitude for acquisition, with, usually, a faint relish for the ordinary sports of boyhood.

But the class includes varieties; such, for example, as the strictly philosophical mind, which

tends towards the highest generalizations; and this order of mind demands a nice discrimination, inasmuch as it is likely to be late developed: its characteristic is a loose hold of mere matters of fact—names, dates, and unassociated particulars; and a much greater readiness in pursuing its own analysis of a knotty subject, than in catching the explanation of the difficulty which may be offered by the teacher. There is next, what might be called the scientific, as distinguished a little from the purely philosophical mind; for in this instance the tastes are of a more determinate sort, and soon find their congenial elements, whether mathematical, mechanical, or physiological. Cases of this sort are liable to little obscurity, and they are easily dealt with. We might then name the talent of observation, directed toward the mineral, animal, or vegetable worlds: this also is a clearly determined faculty; and though susceptible of culture, is not to be diverted from its chosen objects. Such too, are the talents and tastes which impel individuals toward some one of the fine arts—music, painting, sculpture, architecture. The destination of nature, in these cases, if it be decisive enough to endure a little discouragement, ought not to be opposed: a parent may indeed wish something else for his son; but the attempt to turn the original bent of the mind will probably not be of happy issue.

Then, if it may range under the same general

class, there is the taste and talent for language, which also, when manifested in early years, is usually too decisive to allow the endeavour to divert it; nor should a parent wish to disappoint a talent of this kind, available as it is to purposes so important.

The general rule, applicable to the culture of minds indicating any of these particular tastes, is, I think, to favour the expansion of it only so far as to avoid a vexatious opposition; while we mainly urge those pursuits which, if they be delayed until the time when a young man must be left to follow the bent of his genius, are likely to be neglected. The present course of the physical sciences is such as to impose a necessity upon those who cultivate single branches, to make themselves well informed on all points of philosophy, even the most remote; for the characteristic of our modern philosophy, in all its departments, is, first, the division of labour; and then, the free and frequent communion that is kept up among those who are pursuing different paths, involving so much information on the part of each, as shall qualify him to render his correspondence with the body as advantageous as possible to himself, and to others. This point ought to be kept in view by teachers who may have the charge of youth likely to devote themselves to the sciences, or the intellectual arts.

But we have yet to dispose of our third class of gifted minds;—namely, those distinguished by

the force or richness of the imaginative faculty. On this ground difficulties present themselves. Our course however is pretty clear, in the first place, when the imaginative tendency is only of that moderate and temperate sort which may safely be cherished, and which admits of being worked into the general elements of the charecter, so as to constitute, ultimately, nothing more than an agreeable distinction of the mind, securing for it the mild enjoyments of taste and refined feeling. Or secondly, we may know what to do, when this same element of mind, although decisively predominant, is associated with the active qualities of the understanding, and with that energy of the moral sense which, together, form the orator :—in this case a path is open to the gifted mind, approvable to common sense; and the teacher will know how to adapt his course of instruction to the probable destination of his pupil, whether to the pulpit, the bar, or the senate.

But what is to be said if the case we have to do with is one of those, not very frequent, and yet too frequent, to which the luckless term GENIUS is applied?—I mean poetic and sensitive genius. It would generally, in such instances, be a fruitless attempt, nor is it certain that it is a justifiable one, to crush the peculiarity of nature; or violently to thwart her intentions. Nevertheless, inasmuch as minds of this order are to be regarded as destined, if their gift actually

expand itself and be indulged, to misfortune and exquisite suffering—as victims, doomed to bleed for the entertainment of the public; a parent cannot be blamed who labours, by all gentle means, to divert the perilous propensity, and who, without harsh measures, as if the writing a sonnet were a treason, yet succeeds in founding the character upon some firmer bottom of calculable happiness. Pursuits congenial, rather than vehemently opposite to the tastes, would perhaps afford the best means for alluring the mind from its dangerous idolatry of the ideal. Nothing is more to be avoided than that a parent or teacher should declare war against a boy's mental tastes; or that his loved pursuits should be carried on furtively, and as having been formally interdicted. A thorough amity between teacher and pupil, animated by the daily pleasures of intellectual intercourse on open ground, is, as we have said already, the indispensable condition of Home Education.

When we come to speak in detail of the culture of the several intellectual faculties, the fittest opportunity will occur for suggesting such further hints as may seem applicable in the instance of extraordinary talents. This however seems to be the place in which to offer a word or two relative to the practical distinctions to be made between male and female education, which, as we are now supposing, may be carried on conjointly at home. And it is certain that

this combination, while it must leave the two methods broadly distinguished, in many points, will approximate the two to some extent, and especially render the culture bestowed upon the female mind altogether of a higher cast than otherwise it is likely to be, or than what is often attempted in a boarding school.

When we speak of male and female education, carried on in conjunction, under the parental auspices, it must be understood that, although there will be actual association in many pursuits, yet that, after the period of early childhood, it will be proper, if not necessary, for the sake of both, to dissociate brothers and sisters in their more serious studies. Not to mention some reasons for such a separation which are unconnected with our subject, it will be found that the one, or the other order of minds, suffers a disadvantage by being compelled to keep to the same pace. Boys especially, would not easily, while in training with their sisters, be brought up to that pitch of strenuous application which in itself, and as a habit, is of the utmost importance to them. It may indeed happen that the girls of a family surpass their brothers in intelligence and in assiduity, and so might with ease be made to advance step by step with them, even in the severer studies. Nevertheless the former must be made to buckle on an armour, and to gird themselves for a conflict, with which it would be not merely useless, but a positive

disadvantage to the latter to have any thing to do. No good end can be answered by inuring the female mind to arduous, long-continued, mental exertions.

As it is chiefly a moral advantage that boys will derive from association with their sisters at home; so it is chiefly an intellectual advantage which will accrue to the latter from this combination; for while the girls of a family will leave their brothers to advance beyond them in certain arduous paths, they will, with them, come under an animating intellectual treatment, such as it would be very difficult to realize in training them apart.

The points of difference between male and female education relate, first, to that natural diversity of TASTES, which distinguishes the two, from the very dawn of the mind.

It must be theorists, not parents, or not the parents of many children, who attribute this diversity to arbitrary circumstances of treatment. But if, as is manifest, it result from the constitution of nature, it should be respected and allowed for. Taking what is proper to male education as our standard, then female education should be modified in respect of the tastes of the female mind, by never departing very far, if ever at all, from the pleasurable associations of intellectual pursuits—by keeping up a constant correspondence with pure and agreeable moral sentiments (while boys are led on, far and wide,

in paths thoroughly abstracted from any such ideas)—by having much more to do with the concrete—with instances and particular facts, than with abstract principles—by employing the thoughts principally with the observation, collection, and manipulation, of actual forms, species, and specimens; and by allowing more time to the elegancies of literature (beside female accomplishments) than to what passes under the term erudition.

In the next place, the two methods of culture should differ in regard to the difference of POWER, which distinguishes the male and female mind. Every day, in society, we may meet with women equal to, or surpassing men in intelligence; but if male and female minds, of apparently equal intelligence, are brought into comparison, very few instances will occur in which the latter are not far inferior to the former in power. This disparity may be attributed in part to habit and exercise; but it is seen to attach, nearly in the same proportion, to the earliest age. It would be a cruelty therefore to require girls to perform the tasks that should be exacted of their brothers. This mental power is at once—a power of continued application, and a power of grasping and of retaining complex notions: it is strength, and it is force.

Again: some allowance ought, as I am inclined to think, to be made in the culture of the female mind for what I would not call an organic

difference of structure, if I could find a term, near to my meaning, and not so liable to misconstruction. I am not however attempting to treat the subject in the abstract, but practically; and in relation to practice it comes nearly to the same, whether we assume an organic mental difference, or only suppose certain faculties to be much less strongly developed in the one class of minds than in the other. Now, if a very few instances are excepted, it may, I think, be affirmed that the female mind almost wants the faculty of abstraction; especially that form of it whence result philosophical generalization, and mechanical invention. This deficiency in the leading mental power makes itself felt in all the higher processes of culture, and in whatever involves ratiocination. Women indeed often — very often, come sooner into possession of the most important practical truths than men; and when once possessed of them, hold them more firmly; but they reach these useful principles — principles of conduct, by the clue of instinct and sentiment; that is to say, by the guidance of nature; not by ascertaining premises, deducing inferences, and drawing conclusions. Men err so often as they do by reasoning illogically, or on false assumptions: when women err it is by yielding to illusive representations; or from want of some instinctive feminine sentiment.

Parents therefore, in conducting the education of their daughters, and especially when conjoined

with that of their sons, need not perplex themselves with the attempt to lead the former on the path of abstraction, in any one of those studies which involve it. They may indeed be made acquainted with all the facts whence abstraction takes its start, or in which it ends; but in the process itself they need not be deeply versed. A due regard to this point of difference will affect, in some instances, the choice of studies, and oftener the methods of teaching, and the kind of exercises allotted to the two classes of minds. Much disappointment and loss of time may be saved by a clear perception, from the first, of that difference which nature has made in the very structure of the female mind.

Once more, and as is very obvious, the methods of teaching, and the objects of study, should have respect to the very different DESTINATION of men and women in life. This point is too well understood to need any enlargement; nor does it seem requisite to corroborate the dictates of common sense in opposition to the absurdity of the endeavour, which has been sometimes made, and defended, to fit girls to do that which it is certain they will never be called to do. All along I assume, on the part of parents, a firm adherence to great and well-sanctioned principles. We save ourselves therefore the labour of refuting any thing which clearly stands condemned by maxims generally admitted.

The specific intentions of female education,

considered in contrast with that of the other sex, are three:— first, to vivify, elevate, and inform those intellectual tastes in woman, which may be the means of happiness to herself, and which exclude tastes that are frivolous, or pernicious: secondly, to render her the attractive companion of man, and to put her into communication with the world of mind; not indeed to explore it, but to tread its beaten paths in all directions; and lastly, and as a special object, female education should keep in view a woman's probable destination to teach what she has learned. This latter intention may justify some more exact and arduous methods of study than otherwise would appear to be necessary. And let me be allowed to remind parents that how secure so ever may be, to-day, their possession of affluence, and however unlikely it may seem that their daughters should be compelled to look to their accomplishments as the means of independence, it is a wise caution to fit them for a possible reverse of fortune. Moreover, indulging as I do the hope that, in a larger number of instances than heretofore, home education for girls may be adopted, I cannot forget that any such change would, so far as it extended, occasion a call for the assistance of well-informed young women, to conduct the routine of learning, under the direction of parents; for it is not to be supposed that they should be able, personally and alone, to carry forward the various exercises of an elaborate education.

At the commencement of this chapter I referred to the fact that, while it is the object of moral training to reduce individual peculiarities to a conformity with the one standard of excellence, it is on the contrary the intention of intellectual culture to enhance and to cherish any personal and peculiar talents, with a view at once to the advantage of the individual, and the benefit of the community. But now, and in concluding what I have at present to say of the distinction between male and female education, there is room, I think, for the general rule that, although to enhance the special talent of a man be a prudential and proper course, we may, in the culture of the female mind, well aim rather to equalize and soften down the individual intellectual character, than to give prominence to what might distinguish it. The part of woman is not to devote herself to a calling; nor should it be her ambition to shine as a proficient in a single art or branch of science; but to possess a liberal acquaintance with all studies, and a graceful ability in all the elegant arts.

CHAPTER VIII.

ANALYSIS OF THE INTELLECTUAL FACULTIES SO FAR AS RELATES TO THE CULTURE OF EACH.

IT does not appear that any of our prevalent systems of education is founded upon the principle of bestowing distinct and systematic culture upon the several intellectual faculties; nor in fact have I known where to find well digested or sufficient instructions of this kind, such as I might adopt in conducting the education of my own children. I am therefore labouring to supply what I have personally felt the want of, and I entertain the hope that, on this ground, I may be able to render some substantial aid to parents and teachers.

It is true that, of late, attention has been given to the very important distinction between a blind endeavour to impart a certain amount of knowledge, on specific subjects; and that more enlightened method which, irrespective of the measure of attainments actually made by the

learner, aims to give to each of the powers of the mind a training and a habit, such as shall secure to the individual the highest possible future advantage, in the employment of whatever endowments nature may have conferred upon him: and yet, while the general principle has been adverted to, it has been but sparingly applied to the business of education; and scarcely at all followed out in reference to the mental powers separately considered.

The first of the above-named methods is necessarily the one which must be pursued in schools; while the latter is well adapted to the circumstances of private education, and if ably carried out, may more than compensate for the disadvantages acknowledged to attach to the domestic system.

It is very true that the mere conveyance of those branches of knowledge which constitute a school course, does in fact carry with it, and imply, a training of the faculties; and such a training as may be altogether a sufficient preparation for entering upon the common engagements of life; but we have in view something more than this.

And yet, in speaking as I am about to do, of the culture of the intellectual faculties *severally*, I by no means intend that each, singly, and separately, and in formal consecutive order, should engage the attention of the teacher; as if he were first and exclusively to bestow his pains

upon the development and exercise of the power which stands first on the list, and then, in due course, to proceed to the second, and so on. Nothing could be much more ill-judged or impracticable than such a plan of procedure. What is really meant is this: — first, that the teacher should himself distinctly have in prospect the several ends he is to aim at, in the general culture of the mind, so as shall enable him to secure, at the last, the energetic and well-balanced action of all parts of the mental machinery; and secondly, that, in aiming at these ends, he should observe, as nearly as he can, THE ORDER OF NATURE: that is to say, should not anticipate late developed faculties, nor put the mind wrong at the outset by doing first what should be done last, and last what should have been preliminary.

It is very possible, even while we avoid the error of stimulating the faculties too early, yet to occasion some lasting injury, or at least to fail of effecting as much good as we might, merely by following an order not in harmony with those laws which regulate the growth and gradual expansion of the mind. On this ground there can be no safety except in an implicit compliance with the method which nature herself suggests. Our part is to watch what is going on spontaneously in the minds of children, and to follow the process, with our artificial aids, as it advances.

Another preliminary hint is due both to myself and to the reader, and it is this—namely, that I by no means profess to offer a strictly philosophical analysis of the intellectual faculties. To attempt this, in the actual state of what is called "Mental Science," would lead to many difficult discussions; nor is it certain that the practical result of such an analysis, even if it were successfully conducted, would materially differ from the system that may be founded upon the popularly understood distribution of the powers of the mind. In one or two instances, it is true, I shall direct the teacher's attention to certain modes of intellectual action which have been too little regarded; and it will be unavoidable, moreover, to extend a little the meaning of some few terms, and to restrict some others a little; but generally, I endeavour to adhere as closely as possible, as well in system as in phraseology, to what is already received and understood by all persons of cultivated minds. A practical treatise is not the place for promulgating philosophical theories, even if in the present instance the author had a theory to propound.

Besides, and this is to be particularly observed, as a philosophical analysis of the mind should be more exact and severe, so must it also be more comprehensive, than could be of any utility in relation to the purposes of a practical work. In an inquiry of the former kind nothing must be omitted; but in the latter, nothing need be

included which does not claim attention, as the object of early culture. Thus for example, I make no mention, in this chapter, of those elementary faculties which connect the mind with the external world: for I do not think any valuable purpose is secured by those schemes for training the senses, or for developing and sharpening the powers of perception, which some writers have propounded. Nor, on the other hand, does the present work include those subjects which belong to a period of the course of study more advanced than that embraced by a system of Home education: the arduous path of mature study lies beyond our immediate view.

The want of an unexceptionable term, sanctioned by general use, meets us at the first step of this analysis. What I mean to speak of I must, though far from satisfied with the phrase, call, the CONCEPTIVE FACULTY; or that mental power by means of which what has already been present to the perceptions returns, or is brought back to the mind, in the absence of the object, with more or less distinctness, and is then dealt with as a material of cogitation; or, after serving to lead on other ideas, disappears.

It is this power (a power both active and passive) of entertaining IDEAS apart from sensations and perceptions, which seems to be the first point of distinction, marking the superiority of the human mind: not indeed that the animal

orders are altogether destitute of any such faculty, for their possession of it may be indubitably established: but the same facts which prove its existence, as for example, in the horse, the dog, the elephant, exclude the supposition that it is more than a sort of moonlight, as compared with the splendour of the same power in man. It is the Conceptive faculty which gives the earliest indication of INTELLECTUALITY in the infant, after the perceptions have become pretty well defined. Long before any other properly mental operation can be detected, the infant gives proof that it has already come into possession of a not slenderly furnished treasury of images, which, without its bidding, take their turns in enlivening its otherwise vapid existence; and which, although as yet it has acquired no control over them, do not fail to obey the great laws that are to regulate the mental operations of the adult.

A thousand familiar facts give evidence of the existence of this faculty, in the earliest months of life; and a single and conclusive one is afforded by an infant's instantaneous recognition of the most imperfect representative symbol of a known object, and its ready connexion of an idea of such an object with the name of it, a few times repeated.

Too little attention has, I think, hitherto been given to the fact that a child's MENTAL EXISTENCE is constituted almost entirely of THE

WORKINGS OF THE CONCEPTIVE FACULTY. The human mind, in its first period, may be said to be, all IDEALITY; for it is exclusively so during the half of its time, or more, which is passed in sleep; chiefly so whenever no vivid impressions are made upon the senses; and so, to a great extent, while left to find its own sparkling felicity among its toys and gimcracks.

The little regard which has been paid to this main characteristic of infancy and childhood has shown itself in the neglect of many obvious means that offer themselves for giving direction and vividness to the faculty, considered as the prime element of the intellectual life. Yet it is certain that more than a little might be done in this way, and to great advantage; and as it may be made to appear that the rudiment of the power and splendour of some minds, as compared with others, is to be sought for in this same faculty, we may with reason consider the early culture of it as constituting the principal business of early education. To this point then I shall have to direct the teacher's attention in the next chapter, with some amplitude of detail.

Very soon after the conceptive faculty has come into full activity, and indeed without any perceptible interval of time, the mind gives evidence, and in a great variety of modes, that it has acquired a SENSE OF RESEMBLANCE, and in a little time after, a SENSE OF ANALOGY,

which, although in philosophical strictness they should be kept apart, may with convenience, and in relation to practice, be treated of in conjunction. Here again a wide field is open to us, on which much may be effected by an intelligent teacher; and it is precisely on this field that the broad and solid foundation should be laid on which, at a remoter period, the active faculties may rear the superstructure of mental superiority. It is to the above-mentioned faculties, passive as they are, more than active, that the reader's attention is confined in the present volume.

No term employed in speaking of the states and operations of the mind is more loose and ambiguous, than the word MEMORY; for it sometimes means what is only a modification of the conceptive faculty; sometimes, the retention of arbitrarily associated series of particulars, or of trains of words and sentences; and sometimes this same phrase is employed when we are speaking of the complicated operations of the higher faculties—the sense of analogy—the power of abstraction, and the imaginative perceptions. Nevertheless, unwilling as I am to deviate from ordinary modes of speech in a popular and practical work, I shall treat of the culture of the memory as if the subjects therein embraced were more closely related than in fact they are.

The reader who is conversant with mental philosophy may probably expect to see the Association of Ideas, or the Law of Suggestion, as it is otherwise termed, mentioned as an object of culture: but he will find that whatever bears upon this subject, in a practical sense, is substantially included in the culture either of the Memory, or of the Faculty of Abstraction, and of Reasoning; or is embraced in the treatment of the Imaginative Tastes.

A most important step is made in the business of education, when we come, in a formal manner, to give exercise to the Power of Abstraction. It is this power that is the chief prerogative of man, and the main spring of his advancement in every path of knowledge and civilization. It is this, in its higher degrees, that distinguishes one human mind so vastly from another, and is the primary reason of the achievements of the few who lead the way in philosophy and the arts. To this point then the most exact and systematic attention must be given; for it is certain, on the one hand, that any scheme of education which leaves the faculty of abstraction either uncultured or accidentally developed, must be extremely faulty; and on the other, that, if a method of training consonant with the principles of the human mind be digested, and ably put in practice, and the intention of which shall be to give the highest possible advantage to this First

POWER of the rational nature, every thing else will be easy and prosperous.

The RATIOCINATIVE FACULTY is, in the order of nature, late developed, and those who would see it expand under the most favourable auspices must direct their cares, not to the endeavour to anticipate its proper season, but rather to the means of carrying the mind on to a certain point of maturity, before any serious exertion of it is promoted. Nevertheless, from a very early period, and especially after the time when the faculty of abstraction comes under culture, the teacher will keep in view what is to follow, and will watch for, and improve, any favourable opportunities that may occur for giving a little initiative play to the reasoning power, so far as nature herself may appear to have developed it. To what an extent—an extent altogether incalculable, does the well-being of the individual, and of the community, depend upon the soundness, and the consistency, of the culture that may be bestowed upon the reasoning faculty, in early life!

The IMAGINATION—the imaginative sentiments and tastes, and the semi-moral emotions and habits of mind therewith connected, next claim to be considered: and there will then, and in the last place, remain to be treated several highly important mental habits, which bear upon the successful pursuit, either of common inter-

ests, or of philosophical, professional, or literary eminence.

The reader, it is probable, may not at once acquiesce in a distribution of subjects which gives the first place to the Conceptive faculty, and the last to the Imagination; thus severing, by as great an interval as possible, faculties held to be intimately connected, and which are often spoken of as if the one were only a modification of the other: I can only say, in this place, that I consider it as indubitable—that the conceptive power is the very earliest to appear of the properly intellectual elements of our nature—the snow-drop of the mind's flower-garden; and that the imagination and the imaginative sentiments, are the very last to be developed, where nature takes her own course; it is the rich-coloured chrysanthemum of the intellectual parterre. So late in their appearance are the genuine imaginative emotions, and so nearly do they bear upon the confines of personal or adult mental culture, that, except in regard to certain commencements and preparations, the subject might altogether have been excluded, as not belonging to Home Education.

But even when the most assiduous regard has been given to the training of the several faculties and sensibilities of the mind, there remains a not less important labour, though of a rather indefinite kind, the intention of which is to form and to confirm certain practical habits, upon the

perfection of which, as I have just said, the efficiency of the mind, in relation either to common or to professional pursuits, almost entirely depends. The general intellectuality which ought to be the fruit of a course such as the one we are now projecting, requires (if indeed we have in view any thing beyond the mere accomplishment of the individual) to be brought to bear, in a definite manner, upon the arduous labours of real life, whether commercial, professional, philosophical, or literary. What I am speaking of might be called a second education, which, after a youth has received his quantum of intellectual furniture, shall fit him to contend with specific difficulties, and to secure success in the particular line to which he may addict himself.

Much more, in this way, might be done than is often attempted; and after a young man's destination in life has been fixed, he should undergo a discipline, aptly contrived, with a view to the critical points on which success is known to turn in that peculiar path of exertion. Whoever is conversant with active or scientific pursuits, or with the several professions, is well aware of the fact, that, among a number of competitors in any line, it is not the man that seems, abstractedly, the best qualified to bear the palm, who ordinarily carries the prize; but (excluding the not infrequent instances in which mere self-confidence snatches what should have been given

to merit) the successful man is he who best knows how to deal with the knots of the business he undertakes. In every course of mental exertion there is a certain portion in disposing of which different minds are pretty evenly measured, one against another; but when all reach the knot, it is perhaps one only who instantly untwists it, and by this means gets some way a-head of his associates. Now if there be something of natural tact in this sort of ready ability, there is also something which may be acquired, or which may be pertected by a proper discipline; and I think such a discipline may be laid down, and exemplified, in a practicable manner, and that it should occupy a prominent place in a complete education.

CHAPTER IX.

CULTURE OF THE CONCEPTIVE FACULTY.

THE phrase adopted in the present instance is, as I have said, far from being unexceptionable; nevertheless it has the sanction as well of colloquial as of philosophical usage, and the objections to which it may be liable will be of little importance if, in the end, the reader understands what is here meant by it, and in what way the faculty, however it might be designated, should be treated in the business of education.

Far too little regard has, I think, been paid to that leading and early developed element of the mental constitution of which we are now to speak; nor does the fact seem to have been distinctly noticed, that it is the chief characteristic of the first years of life; nor do I know that the culture of it has ever been systematically treated of, or attempted. And yet there is hardly

any intellectual energy more susceptible of improvement by discipline and exercise, or more likely to repay the pains bestowed upon it, as conducive to ulterior mental operations.

Nature, for purposes which it is not very difficult to divine, has allowed an absolute predominance to the conceptive faculty during the season of infancy, and has granted it a principal share in the mental economy during the succeeding years of childhood. In saying this I am by no means thinking of unusual instances of imaginative development; but of human nature, at large.

Impressions made upon the senses by external objects return to the mind, as every one knows, in the absence of the objects: and this happens especially with the objects of hearing and of sight; and most so, with the latter. It is in fact from the predominance of our conceptions of visible objects, that we have come to apply the words—*idea* and *image* to the entire class of REPEATED IMPRESSIONS, whencesoever received. The distinctness of our ideas, their permanence, and the power they exert over us, depend upon various circumstances, such as the frequency of the original impression, or its peculiarity, or the vividness of the emotions with which it may happen to have been associated.

Yet these reiterated impressions of external objects, or IDEAS, do not always, or usually, return precisely as they entered the mind; but

undergo new combinations, infinitely diversified; some of which combinations are formed independently of any act of the mind, while others are the product of its deliberate intention: they also follow each other, in part in obedience to certain constant principles of association, and in part in consequence of the mind's controlling power over them; and it is here, principally, that we find room for that culture of which the faculty is susceptible.

Yet inasmuch as the elementary ideas of the external world return not precisely as they come, but in modes infinitely diversified, and under new forms of combination, or as we might say, of *configuration*, it is manifest that a small stock of materials—such a stock, for example, as may have been accumulated by an infant during its first two years, will be enough to work up into forms, ever and again diversified. Nevertheless, how much soever diversified, the difference between a fortuitous train of ideas furnished by the Conceptive faculty, and a fixed train supplied by the Memory, is distinctly kept in view; and the clear preservation of this distinction is essential to the soundness of the mind; for to be liable to uncertainty, in endeavouring to distinguish the records of memory from the creations of the fancy, is the symptom of an impaired and decaying intellect.

Although the predominance of the conceptive faculty during the first years of life has been so

little considered as not to have been calculated upon in our schemes of education, yet nothing is more conspicuous than the fact. The instances in which its operation may be observed are of several kinds; as first—whenever any familiar object or person is recognised, after an interval, by a child; as when a brother, or sister, or a nurse, after an absence, is greeted by a smile of familiarity, and the arms are extended; for an infant, in this instance, connects the now present object —not with the same *object*, before seen; but with the *image* of it conserved by the mind. The reader, if not much accustomed to analyze his own notions of mental operations, may perhaps need to have the simple fact stated that what is meant by *remembering*, or recognising something now before the eye, is—the connecting the immediate impression on the senses, with a previously admitted and treasured idea or image, and which has been preserved by the mind with so much fidelity as to leave no doubt, in most cases, concerning the identity of the object. So soon therefore as an infant is observed to *recognise* any thing or person, and of which recognition it gives indubitable signs, so soon may we be sure that the conceptive faculty has come into operation; and this happens certainly in the third month, and often earlier.

Or if we go on to the time when the notion of property has just got a lodgment in the mind, we may meet with a pertinent instance of the

vivacity of the conceptive power, when the little stickler for its rights finds its own horse or doll in its brother's or sister's hand; and then, running to find brother's or sister's horse or doll, eagerly discusses the question of *meum* and *tuum*, and, notwithstanding the close resemblance of the two subjects of debate, fixes its grasp upon the real and genuine *meum*. That is to say, this same lisping assertor of its rights, has in its brain a picture of its plaything, so exact and particular, that it serves it at any time as a *tally* by means of which it may recover the archetype. Yet this same mental miniature of the hobby, or the rose-lipped darling, does not merely come back, when recalled by the presence of the original, but it floats before the internal eye—called and uncalled, waking and sleeping; of which further fact, with all its endless consequences, we have evidence enough; as for instance, when to the little girl, lost in reverie, we suddenly put the question—What are you thinking about? "About dolly." "About dolly—which dolly?" "Oh my best dolly that moves her eyes." Sometimes indeed dolly's own dear name is heard muttered in sleep, when, as we need not doubt, the fair image is vividly present to the fancy.

Nor is this all; for while the doating little mamma, just referred to, has her "own dolly," on her lap, or is dressing or undressing it, or is taking it abroad, or preparing its breakfast, and

despatching it to school, the conceptive faculty is working in another and a copious manner, and so as to involve all sorts of consequences to the future character. For the object in the hand becomes the nucleus of a hundred captivating conceptions of things not present, but which, by the aid of the mind's creative powers, stand forth out of vacancy, almost as distinctly as if actually before the eye. Dolly is the heroine of a drama, vividly acted in the soul's little theatre. Hence, that is to say from the richness and vivacity of the conceptive faculty, comes all, or nearly all the never failing delight of which toys are the occasion.

But again; this same faculty gives evidence of its activity by the way in which its operations are connected with graphic representations of familiar objects. Having already alluded to this subject, I will here only observe that, by the aid of very rude sketches, adapted to the purpose, the curious reader may, if he pleases, satisfy himself as to the extent and exactness of a child's conceptive power. It would be easy to specify a hundred modes in which this experiment might be varied; but I pass on to notice the still more striking proof furnished of the refinement which the conceptive faculty reaches at a very early age, by the velocity and the precision with which images stored in the mind connect themselves with arbitrary signs, that is to say, with words.

This subject, familiar as it is to those who are conversant with mental philosophy, and familiar

too, as a common fact, to every one, may deserve a little attention from the reader who hitherto has not much thought of it. We take then the instance of a child of three years old, and one of only ordinary intelligence—any family may furnish a parallel example. Accustomed only to the objects of a rural and inland home, he accompanied his mamma, let us suppose, a year ago, to a watering place. At different times, during the intervening months, the striking objects of that new world have been recalled to his recollection in vivid language; and now, if questioned concerning these objects, and many others therewith associated, although the questions are varied as much as we please in phraseology, and although new points of view are taken, he will convince his catechist that there is present to his mind's eye a not obscure set of pictures—of the sea in its changing aspects—of the baths—of the buildings—of the equipages—of the downs. Or show him, unexpectedly, a view of the Pavilion, or of the chain pier, and it will be unquestionable that the things seen so long ago exist still, by their perfect images in his mind.

Now in this case, and facts of the same sort meet us in a hundred different forms, we have not only, as in those just before noted, the recognition of an object, as one that has been seen before, when again it presents itself to the eye, nor the recognition of it as rudely pictured, nor the spontaneous recurrence of the image to the fancy; but

there is the recovery of the image, in all its variety of adjuncts, as connected with WORDS. Moreover this connexion, so early established between images stored by the conceptive faculty, and certain words or sentences, is not of so confined a sort as that only a particular series of sounds has become associated with the train of images, but it is language abstractedly which has so linked itself with images, and with the separate qualities and incidental aspects of objects. That this is the fact is easily proved, either by our describing recollected objects in a variety of phrases, and which will be severally recognised; or, in a still more striking manner, by our employing known epithets to describe objects that have never been actually seen. And yet in this latter case we may easily convince ourselves, that a real and vivid idea has been called up in the child's mind, as thus—"Did you ever see a crocodile?" "No." "But you have seen a print of one:—well; what sort of animal is it?" "It is so and so—" . . . "That will do: now I will describe to you another sort of animal: think then of a creature somewhat like a crocodile, yet so large that, if it were on the lawn, it would reach from one of the gates to the other: and think of it covered with scales, yellow, green and crimson, sparkling in the sun; and having broad wings so that it could flutter about like a bat; and with a long tail, crackling and rattling, as it flies, like the post-boy's whip: and think of its eyes glaring

in the twilight, like the lamps of the coach which you saw coming along the road last night: —now can you fancy such a creature?—Well then, now tell me, in your own way, what sort of thing we have been thinking of." A vivacious child, in such an instance, will give his own description of the primeval dragon he has fancied; and he will do so in such terms as shall make it evident that he is not repeating remembered phrases merely; but is actually employing abstract and concrete words, as representatives of the conception that has lodged itself in his mind. The adjectives he chooses, whether the most appropriate or not, are such as have become firmly ticketed in his little brain to the sensible qualities they stand for.

If, during the early years of life, and before serious cares and duties occupy the thoughts, a full half of the waking hours are given to the workings of the conceptive power, we cannot but notice the significant fact that nature has also put under its influence all the hours of sleep which, with a young child, are usually a half of the twenty-four. I think that none who have attentively watched children in sleep, and have had frequent opportunities for so doing under a variety of circumstances, can doubt that the mind of a sleeping child is ordinarily, if not constantly, occupied with dreams. Even the soundest and most healthful sleep affords indications hardly to be misunderstood of the busy shifting of the

scenes that are entertaining the little brain. If it were here proper to pursue at length a subject of this sort, I could adduce a variety of instances, proving or illustrating the point which, at present, I must assume as undisputed.

Now when we consider that dreams are, as to their vividness, and the impression of reality, little, if at all inferior to actual impressions on the senses, we cannot doubt that some specific purpose, in relation to the mechanism of the intellectual system, is intended to be secured by the arrangement which throws the soul, during so large a portion of its entire existence, in early life, wholly upon the materials of its ideality. Some curious speculations offer themselves on this ground which must here be omitted. There is however one conjecture, which, as connected with our subject in a practical manner, may be adverted to. I think then it is a constant concomitant of dreaming to connect *words* with what is passing before the fancy: there is a sort of muttering of the names of things, or an incoherent utterance of the mind's impressions relating to the objects present to it: and we know that, in the perturbed sleep of a feverish patient, and which is a state wherein, owing to the want of animal composure, the dream agitates the muscular system, and in a manner transpires, so as to be dimly perceptible to a bystander—that in such a state there is very usually an audible muttering, or continuous whisper, in a sepulchral tone, as if

the mind were in parley with its own chimeras.

I am inclined then to think that one of the purposes of dreaming, is to bring the conceptive faculty into an unfailing, or as we might say, a deep worn usage of connecting itself with language. If we recollect how much, in the economy of social life, and in the employment of the higher faculties, turns upon the instantaneous command of language, and recollect too the miraculous celerity of thought required in bringing forward the word wanted at each instant of continuous discourse, and recollect too that the whole of the material of language is purely arbitrary, and that from three thousand, to thirty thousand of these arbitrary signs are required for carrying forward ordinary communication, we shall not think it surprising that the mind needs more than a little drilling in this exercise. At an early age—let us say in the seventh year, a child uses the entire stock of words known to it with full as much celerity of utterance and certainty of recollection as he ever does afterwards; and the acquirement of this ready use of so complicated a machinery, at so early an age, seems to imply that the acquisition has been favoured by some latent process, in addition to the obvious one of the actual and waking use of speech.

A child often mistakes the meaning of a word, and uses it absurdly; but nothing is more rare, if indeed such a thing ever occurs, than for the

organic operation of connecting words with thoughts to hitch, or, as one might say—get off the pins. A voluble little girl, employing a vocabulary of one, two, or three thousand words, is never stopped by a jar of the machinery connecting the word and the thought. Now this perfect working of an apparatus so complicated, well consists with the belief that the sixteen or twenty hours of every day—sleeping or waking, during which the conceptive faculty is in undisturbed operation, are devoted, in the intention of nature, to the latent process which assimilates ideas and words, in an indissoluble manner.

Even the fitful incoherence and wild caprices of dreams, which are their very characteristics, may have their intention, as an exercise, habituating the mind, in its use of language, to leap without preparation from one class of objects to another, as is required in keeping pace with the chance current of ordinary conversation.

Our practical inference from this supposition goes to enhance the importance of the sort of culture of the conceptive faculty we have in view, inasmuch as it appears to be an object intended, and provided for by nature herself, with peculiar care.

The inferior orders, as is manifest, possess that lower function of the conceptive faculty which is requisite for the recognition of objects, when they are a second time presented to the senses. This is apparent in the entire economy

of animal life; or in a more special manner it is indicated by such familiar facts as the knowledge which a horse or a dog retains of a road he has only once travelled, and the notice he takes of any particular change in its objects, such as a fence, instead of a hedge, or a new road laid across an old one. But it is doubtful how far, or whether at all, any of the inferior classes of minds have the power to ponder absent objects, or to entertain the vacant seasons of their existence with images flitting before the fancy. Something of this sort may be probably conjectured; but it is manifest that, in this respect, the youngest or the rudest human mind vastly surpasses the most intellectual of the brutes.

It is, as I have said, by the firm linking of the conceptive faculty with words, that we acquire a ready and unfailing command of speech; and it is by means of the associations formed among ideas, whether imaginative or rational—concrete or abstract, that the higher faculties exert their peculiar energies. The conceptive faculty is in these modes the ground-work of the entire intellectual system.

A little must be said concerning the relation of the senses, severally, to the conceptive faculty; and it will appear that, while certain impressions upon the senses are retained with the utmost precision and permanency, so as to be recognised infallibly after the longest intervals

of time, when the impression is repeated, they come only in a very imperfect manner under the control of the mind, so as to be recalled apart from the external object. Thus, for example, the impressions of smell and taste are as well defined, and as permanent as those of sight; for a particular flavour or scent, as of a fruit or flower, familiar in childhood, and then only, is recognised sixty years afterwards, when accidentally met with, and serves to recall a train of the bright images of early life. But it is only in a very vague manner, if at all, that impressions made upon these senses can be recalled to the mind, apart from their objects. It is not quite certain that we can at all think of even the most familiar and pungent tastes and smells, entirely abstracted from the usual visible accompaniments of these sensations. Cayenne pepper affects the tongue much more vividly than its bright colour does the eye; but in attempting to think of this acrid condiment, its visible appearance prevails entirely over the feeble traces left upon the mind by the taste; and I can mentally see it, much sooner than mentally taste it.

It is the same in degree, though not so completely, with muscular sensations, with the sensations of touch, and with our visceral consciousness. Severe pain, entirely as it engrosses the mind when present, can only be very dimly remembered; and we must, in this instance, admire the beneficent constitution of our nature; for if sensa-

tions of pain, visceral or muscular, returned upon the mind with a vividness proportioned to that which belongs to the objects of sight, our lives, after having once suffered any extreme anguish, would be a perpetual torture. Very few of the objects of sight are in themselves, and in a positive manner painful.

The sensations of hearing come next, as to their relation to the conceptive power. No sensations are better defined, none are retained in their full peculiarity longer; and they unquestionably fall under the control of the mind, so as to be readily recovered by a mental effort, or quest, and without any accompanying aid from the voice, as a man hums a tune, to regain the idea of it; for we think of the tone of the voices of our dear friends, long absent—of the sound of popular acclamations—of thunder—of the singing of birds—of the ticking of a clock, as heard during the darkness and stillness of the night; and especially, musical persons can, without any audible aid, mentally repeat an air, or even a complicated harmony.

Yet it is the sensations of sight, that is to say, not its elementary sensations, but those acquired perceptions which give us the notion of things as they are, that bear sway in the conceptive faculty. It is to its picture gallery of the visible world that the mind retires at every moment when it is not occupied by that world itself: it is over these images that it exerts a plastic power,

recombining the elements they consist of, in an infinite diversity of modes; and it is out of these same elements, fantastically consorted, that those magic halls are stocked and ornamented, through which the soul flits and roams during sleep.

The furniture of the conceptive faculty, as derived from the objects of sight, constitutes the principal wealth of the mind, and upon the ready command of these treasures, with some specific end in view, depends in great measure its power. The quality and the extent of these ideal stores, and the degree in which they are available as materials for the other faculties to work upon, are a chief reason of the vast difference between one mind and another, and generally of the difference between cultured and uncultured minds. Whatever may be the path of exertion pursued by any one, and even if it lead over ground the most remote from the regions of the imagination, it will still be true that, if the conceptive faculty in the particular department which the mind occupies, be full fraught with its proper objects, and be prompt in producing its stores, such a mind will take the lead among others.

The statesman, disposing of the driest details of public business, the merchant, calculating the chances of a distant enterprise, the lawyer, working his way through the most abstruse relations of right and property, all advance with rapidity and ease, or with a sluggish and

stumbling step, according to the vivacity and richness of the Conceptive faculty. For just as we comprehend and deal with things actually before the eye far more readily and certainly than we can with such as are out of sight; so do we comprehend and deal with things out of sight with an ease and confidence directly proportioned to the vividness and perfection of the CONCEPTION, as compared with the REALITY.

Let a man of business select, from the diversity of his engagements, that one which seems the most absolutely to exclude the visible qualities of things, and he will yet find, if he narrowly analyzes the mental operation while this particular branch of his business engages his attention, that it is very greatly by the aid of the IDEAS of objects and persons as visible, that he retains his hold of the various particulars of the calculation, or of the adjustment of interests; and that, if he can fancy himself entirely shorn of these ideas, his thoughts would immediately fall into confusion.

If it be so in the extreme instances which we have now supposed, how much more is it thus on all occasions in which the visible forms and qualities of things are immediately connected with the mental process! Of what importance to us is the Conceptive faculty while taking our part in ordinary conversation, turning as it does upon narrative—description—comparison—allusion:—of what sovereign importance to the

public speaker, or to the writer—to the poet and the painter, the sculptor and the architect! And it might be shown in detail that the divining skill of the physician in realizing to himself the interior condition of the animal system, and the adroitness and tact of the surgeon in the performance of obscure operations, turn very much upon the exactness and vivacity of the Conceptive faculty, which might be called the true stethoscope. Whether we are distinctly conscious of the fact or not, it may be proved that this IDEALITY, or power of calling up images of visible objects, is the basis of our mental operations, of whatever kind, and whether ordinary or professional—whether philosophical or imaginative.

On this ground then it is natural to inquire whether any means may be employed, during the course of education, for enriching this prime faculty, and for enhancing its appliancy and energy. Now while it is admitted that a liberal education does of itself secure these ends to a great extent, I confidently think that much more may be effected in this particular than has often been attempted. The culture of the Reason, and of the Imagination, and the training of the mind for special engagements, demand a commencement of the process to be made in the culture of the Conceptive faculty.

Although not directly related to the subject of intellectual culture, I cannot altogether omit to

refer to the important fact that the immediate object of the emotions and passions is, in a large proportion of instances, something which is supplied by the mind itself from the stores of its conceptions: it is around the ideas of things and persons that the deepest affections of the soul, as well as its most refined sentiments, revolve. The condition therefore of the mind, in regard to its Ideality, powerfully influences its moral state; and it may safely be said that a mind full stored with rational and agreeable materials, or, as we may say, preoccupied, is indirectly secured against the intrusion of many dangerous tendencies; while this same preoccupation consists well with the activity of all the benevolent and gentle sympathies. This subject is too copious a one to be here pursued; but a passing reference to it may serve to give the greater weight to the suggestions that are to follow.

The hints I have to offer in the present chapter might be arranged under three heads, the first comprehending what relates to the means proper for giving vivacity and precision to the Conceptive faculty WHILE THE OBJECTS UPON WHICH IT IS EMPLOYED ARE ACTUALLY PRESENT:—the second including whatever bears upon its operations IN THE ABSENCE OF THOSE OBJECTS; and the third embracing the means to be used for establishing a ready and perfect correspondence between LANGUAGE and the Conceptive faculty. Nevertheless a somewhat less formal

method may best insure brevity, in treating the first and second of the above-named subjects; although the last must be separately considered.

It might seem very natural to take it for granted that the truth and vivacity of the ideas treasured in the mind, if not the command which it afterwards exercises over them, must be proportioned to the exactness and activity of the faculty of observation; or to the degree of attention that is given to whatever passes before the eye. But I do not think it is so in fact; for one meets with very nice observers, and with persons who, when questioned on particular points, are able to supply the most precise information; but whose Conceptive faculty is nevertheless poor, cold, and feeble. On the other hand some, nor are the instances rare, although they observe vaguely, yet not only live in a world of rich conceptions, but can paint to the life, I mean in words, whatever they have seen, or have heard described.

The habit and power of nice observation is doubtless an important object of culture; but the vigour and vivacity of the Conceptive faculty appears to be in great measure irrespective of it, and to depend more directly upon the strength of the emotions of which the mind is naturally susceptible. This seems in fact to be the law of the Conceptive power—That the vividness of its impressions are directly as the force or intensity of the emotions which may be at work at the time

when such impressions are received. The recollection of this principle of the human mind goes far in regulating the practical measures of a systematic education. Many familiar facts establish what we now affirm, and show that it is *feeling*, in its various degrees and kinds, from the gentlest pleasurable sentiments, to the most overwhelming hurricane of the passions, that stimulates the senses, and fixes indelibly upon the mind the impressions of external objects. The poetic character turns upon this very connexion between the emotions, or the sensibilities, and the Conceptive faculty; the poet is one whose keen susceptibility, or whose profound affections, give a tenfold intensity to whatever, in external nature, has in any way the power to move the human mind. Poetry is—a picture of the external world, painted in the vivid colours that are supplied by refined and intense emotions. The cherished recollections of childhood, often as bright and clear at eighty as they were at twenty, are those treasures of the Conceptive faculty which have been consigned to its keeping under the influence of vivid pleasurable emotions; hence it is those chiefly, whose early years have been passed joyously, and in the country, that retain to extreme age, and after the recollections of mid-life are faded, the gay golden scenes of boyhood. The decaying mind, decrepit as the body, and void of all that once so much engrossed its regards, but still rich in tales of "seventy

years back," might be compared to a desolated mansion in which one finds—no busy inmates, indeed, and no furniture; but the walls of the saloon still clad in the tapestries that were the pride of the house a century ago.

The diversities of natural talent allowed for, it is always those classes of men whose course of life is the most adventurous, and whose passions —whose hopes, fears, ambition, are liable to be wrought up to the highest pitch, that are the most distinguished by a bold and graphic style of speech, whose descriptions of scenes are the most impressive, and whose epithets have the most striking appropriateness. The ordinary vocabulary of men who have survived a thousand perils, and been the foot-balls of Fortune from their youth up, always abounds with picturesque quaintnesses of expression. Compare, in this particular, the snug shop-keeper who has sedately trod the streets of a quiet town fifty years, although by habits of reading he may happen to have at command the stores of the language, with the style of his harebrained brother or cousin—the mother's grief, who went abroad a boy, who has suffered a dozen shipwrecks and captivities, and has acquired and lost a fortune two or three times over. It is not merely in such a case that more things have been seen, and that aspects of nature more various have been contemplated; but that what has been seen has been looked at when the mind was

otherwise powerfully stimulated by hope and fear.

In practice therefore, we should entirely miss our purpose if, with a view to cultivate or enrich the Conceptive faculty, we were to direct our endeavours chiefly to the habit of observation. This is indeed to be cultivated, but at a later time, and as connected with other purposes; for the power of observing accurately is modified by some definite result, aimed at. Thus there is the artist's eye for nature, and the poet's eye, and the eye of the naturalist, or of the physical philosopher. And these several habits of the perceptive faculty differ essentially, and are in fact rarely united in the same individual. When the natural taste and the destination of a young person have been ascertained, then is the time for training the eye to catch that peculiar class of objects, or those shades of colour, and refinements of form, which belong to his chosen art or study.

It is true, as I have just said, that the more agitating emotions of the mind, and its stormy passions, serve to give force and permanence to the conceptions; but of course these are not the means which we can wish to employ in the business of education. What is actually within our power, in this way, is that bright joyousness, and that vivid robust hilarity which has already been insisted upon, as the condition of a prosperous education. And here it is inevitable again

to say that it is the mild, healthful, pleasures of a country life, readily as they assimilate with the natural sentiments of childhood and youth, that will incomparably the best promote the enrichment of the Conceptive faculty, and favour impressions such as shall be at once indelible, and of the most desirable class. A romantic locality possesses, in this view, a very peculiar advantage; but, as a substitute for it, a real benefit will accrue—a benefit extending itself even to the moral sentiments, from a visit once and again to some of the mountainous districts of our island. To children of active and cultured minds, already fraught with natural tastes, tastes formed in the country, the exhilaration of such a visit will bring with it movement enough to insure the making an indelible impression of the grand and beautiful upon the imagination.

While the beautiful or the sublime in nature is before the eye of young persons, we should be greatly overshooting the mark, and defeating our intention, were we to be reading and talking poetry with them, or labouring to work them up to a pitch of sentimentality. All that is wanted is to allow, and to provide for, buoyant and various enjoyments. And let not persons of a severe cast of mind, if any such should be among my readers, either frown upon, or hold in contempt, recommendations of the sort I am now venturing to give; for we are not proposing to train up poets, or artists, or sentimentalists; but

are aiming to replenish the mind with bright and available materials, such as shall impart to it an abundance of intellectual wealth, and give it breadth and elevation; and by these natural means exclude whatever is frivolous, vulgar, selfish, or sensual; favouring at the same time, by the natural assimilation of kindred emotions, the growth of the best moral sentiments. And we are aiming to do this at the only time when it can be done effectively.

Those who may be inclined to advance objections in this instance, might do well to consider that it is a principle of sovereign importance and wide application in the culture as well of the moral sentiments as of the intellect—That education is not a negative process, devised for shutting out the knowledge and contact of evil; but in every sense, a positive process, providing for the exclusion of evil by preoccupying the mind and heart with the best materials and the best habits. Now in reference to the subject in hand, if we remember how much injury accrues often to the moral sentiments from a disordered state of the imagination, and if, at the same time, we assent to the principle above-named, and therefore do not think of guarding against the mischiefs we apprehend, either by rendering this faculty torpid (if that were possible) or by depriving it of aliment and objects, we shall grant that no little importance attaches to the culture and replenishment of the Conceptive faculty. I am

fully convinced that this preliminary branch of a complete education, assiduously attended to, would go far to ensure a prosperous issue as well to the moral, as to the intellectual training.

In illustration of this assertion I will refer to a very different class of objects embraced by the Conceptive faculty, when in an active condition—I mean human character, and personal peculiarities. Children, as every one knows, have a strong sense of physiognomy, and this instinct, if it be rather more vivid than usual, and if it be left to take its own course, very readily, and especially in the female mind, becomes allied with unamiable or even malign sentiments; and in its ripened form constitutes an order of character remote from whatever is lovely and benevolent.

Now, in any such case, instead of preaching charity in a formal manner (proper indeed as such instructions may be in their place and time) one might endeavour to put the keen observing instinct upon another track; and by directing the shrewd eye to those more broad characteristics, partly comic, partly picturesque, which mark callings and modes of life among the laborious classes, give innocent occupation to a faculty that will be sure to find its objects. With the same view, and with still higher advantage, we may turn to the peculiarities of national costume and manners, and go on to fill the imagination, by means of graphic representation and description, with whatever is most

striking in the dresses, arms, modes of life, and general exterior of the nations that have figured in history.

It is certain that, while malevolent or chilling sentiments, almost invariably, connect themselves with a keen sense of personal peculiarities, when this power of discrimination takes its range only within a narrow circle, as upon the individuals of a neighbourhood; on the contrary, bland and kindly feelings, and a disposition to find something good under every form of humanity, is the usual, if not constant accompaniment of the very same faculty when brought to bear upon the wide varieties of human nature, in all classes of society, in all countries, and in all times. I am not now called upon to account for the fact; but a fact it is, that none are more indulgent toward their fellows, none assimilate more readily with persons and modes new to them, none walk about the world with a broader preparation of comprehensive charity, none are so free from petty jealousies and sour evil surmises, none so exempt from splenetic prejudices, as those who have a quick eye to catch the *dramatic* and the *picturesque* in human character, and whose imagination teems with whatever of this sort may be furnished by travel, and converse with the world, or by history and antiquarian lore. The scrutiny of human nature on a small scale is one of the most dangerous of employments; but the study of it on a large

scale is one of the safest, and the most salubrious.

By some readers it might be thought trivial if I were to add that, with the important object in view of preoccupying the imagination with widely gathered objects, and with such as are the most proper for excluding those which may excite malign feelings, I would avail myself of the pencil, and of its choicest products, as the means of bringing before the eye the world of human nature, in all its picturesque aspects. Art may thus be made to cater for the benevolent sympathies.—The *picturesque* seems to have the peculiar property of arresting the mind on its way toward such an analysis of motives as hardly consists with kindly and pleasurable feelings.

On the principle which we have assumed—That the Conceptive faculty is the earliest developed, and the first to reach its maturity, and that moreover it supplies materials and a basis for every other mental operation, the entire body of studies usually taught at an early period should be recast; and instead of intermingling, as is commonly done, the abstruse, and the ratiocinative, and the technical portions of them, with that which is addressed to the Ideal faculty, I would first gather from each, just so much as may be presented in a descriptive form; and by this means supply the mind with the greatest

amount of materials, before any exercise of an arduous kind is exacted. This recommendation requires to be exemplified a little in its details, which I will now endeavour to do.——

The teacher then will recollect that the mixed sciences, and most of the studies usually embraced in a school course, include three easily distinguishable portions, namely, first, the merely TECHNICAL part, which advances definitions, explains the terms and phrases employed in the particular science, announces the principle of arrangement or classification resorted to in it, and specifies the best methods of proceeding, on the part of the teacher and learner. In the next place comes the RATIOCINATIVE part of the science, or those general truths and abstract principles that have resulted from inductive or mathematical processes of reasoning. Lastly, though not always kept back till the last, come the actual facts, and the visible objects and phenomena that constitute the subject matter of the science. Thus for example, in teaching astronomy, as it is often taught, the learner is required, as a necessary preliminary, to fix in his memory the various phrases, latin, greek, and arabic, that have been accumulated in the course of centuries, for expressing, not only the natural and real, but the artificial relations of the heavenly bodies, and their intricate movements; and it is well if he be able, after weeks or months of toil, to define correctly—nodes, nutation, parallax,

precession, cycles, azimuth, sidereal time, aberration of light, and so forth.

Then come the laws of the celestial motions, or the principles of the mechanism of the heavens; that is to say, the PHILOSOPHY of astronomy, and last, though it should be first, the physical and visible, or conceivable facts to which the whole relates: that is to say—so much as is known, or may be fairly conjectured, concerning the physical constitution of the sun, planets, satellites, comets, and fixed stars, their magnitudes, distances, and periods; all which may be understood by a child of clear intellect without knowing a syllable of either of the other two portions of the science—without having heard a word which is not in colloquial use, or being required to attend to any abstract law. Or to take the instance of Botany:—we have its ponderous nomenclature, and its arbitrary principles of arrangement;—then its physiological system, or laws of vegetable life; and lastly its purely graphic or descriptive part.

Not to repeat what has been advanced in a preceding chapter, I here refer to it, in relation to the usual methods of teaching, first, the crabbed rudiments of a science, and last its intelligible facts; logical order being observed, where natural order ought to give law to our methods. The former does indeed demand that *generals* should precede *particulars*; but the

latter directs the teacher to reverse this artificial order.

What is termed the Use of the Globes, and which might better be called the abuse of them, if we are speaking of early education, affords another instance of that, as I think, mistaken practice which, while it offends nature, actually shuts out intelligence from all but the most resolutely intellectual minds. Instead of placing before the learner, in the first place, the palpable, visible, and picturesque facts of physical astronomy, and physical geography, and which very few children would fail to listen to with delight; the teacher, book in hand, or forcing the book into the hands of the learner, afflicts him in some such style as this—"The Colures are two great circles, imagined to intersect each other at right angles in the poles of the world: one of them passes through the solstitial, and the other through the equinoctial point of the ecliptic, whence the first is denominated the solstitial, and the second the equinoctial colure. This last determines the equinoxes, and the former the solstices," &c. &c. Such is the style in which mere children are too often introduced to the sciences, and are thus alienated from subjects in which they might have found delight. The paragraph I have taken from only the sixth page of a much used school book, if rendered into dutch or chinese, would have been not a whit less beneficial to thousands of those who,

in their sorrowful school days, have learned, repeated, and instantly afterwards forgotten it. It is not that the technical parts of the sciences should not be learned; but they should be kept out of sight until after the mind has become familiar with the visible realities to which they relate.

A description of the earth, combining many topics, separately treated of in five or six sciences —that is to say, astronomy, geography, geology, hydrography, mineralogy, meteorology, and, to some extent, natural history, affords as good an opportunity as we can anywhere find for calling the Conceptive faculty into play, and for enriching it with splendid ideas. What we want, in the training of this faculty, is to accustom the mind to stretch out from the boundary of things actually seen, and to give itself a sort of intellectual ubiquity, by the effort which realizes remote scenes as analogous to surrounding objects; and yet as unlike them. A child is to be led on, until he breaks over his horizon; he is to be exercised and informed until he can wing his way, north or south, east or west; and can show in apt and vivid language, that his imagination has actually taken the leap, and has returned—whether it be from the tempest-rocked Hebrides, or the ice-bound northern ocean, from the red man's wilderness of the west, or from the steppes of central Asia; from the teeming swamps of the Amazon, or from the sirocco deserts of Africa, or from the tufted islets of the Pacific,

or the heaving flanks of Etna, or the marbled shores of Greece.

By taking up the elements of natural scenery, as found in our own landscapes and climate—by the copious use of pictorial representations—by well-selected passages from the most lively of our modern travellers, and by combining the whole in a vivid, condensed, and even florid colloquial style—the *vivâ voce* painting that embodies the entire wealth of the language, as to its epithets;—by these means, all the rich scenes of this our planet may be lodged in the minds of children, and so may become treasures of thought, imparting hereafter, even when least apparent, a copiousness, and a breadth, and a variety to the style of speaking and of writing, on whatever subject. Need we compare this kind of enrichment of the Conceptive faculty with the hard acquired ability to tell you, in a moment, the latitude and longitude of fifty towns, or the population—"according to the last returns, and the best authorities," of the capitals of Europe?

But besides going through the characteristic scenes of the four continents, as a traveller does; we must take the earth as a whole, or as a planet, and aid the mind in looking at it as from a point of view whence it might be seen, spinning on its axis, cloud-mottled, snow-tipped, with its bulging tide wave, heading on daily from the equatorial Atlantic, to the northern straits;

with its steady monsoons, and its angry tornados, its fire-spitting craters, its verdant and swarming patches of life, and its red arid expanses of sand. Let the mind be assisted in its efforts to grasp the contrasted simultaneous condition of the several hemispheres; that is to say, the eastern and western, in their daily, and the northern and southern, in their annual changes. The very effort which we wish to make easy to the Conceptive faculty, is that of leaping from the scene present before the senses, to the opposite scene, remote from them. The mental effect is different, and a more vigorous grasp of the IDEAL is had, in conceiving, for example, of noon now scorching the plains of Asia, while we are shrouded by night, or of summer, now glowing in South Africa, while we are buried in snow, than as if our own ensuing night, or our own approaching summer, were thought of. The Conceptive faculty takes a bolder step in realizing what is remote, than what is future, even if the objects be substantially the same.

In connexion with these same subjects, the teacher has an excellent theme before him if he be qualified to picture forth the successive conditions of our planet, as indicated by geological science: and I shall be understood as meaning that what, in this stage of education, he is in quest of is vivid description of visible and palpable objects; not scientific statements, conducive to the establishment of a theory: these are to come

in their time, but not yet; and it is an error, in my opinion, to put into the hands of children, or even of young persons, in the first instance, a rudimental book, condensing the abstruse and ratiocinative principles of the sciences.

From the description of the earth, it will be easy to make good our way outward, toward the heavens. Whether or not children have yet heard of the signs of the zodiac, or know any thing of declination, equation of the centre, or the syzygies of the moon's orbit, they may be led on until they can plunge boldly into the abyss of worlds around us, and by the aid of the telescope, and of vivid descriptive discourses, hold a steady flight, from point to point, of the visible universe. How many who have learned all about the celestial globe, and can twirl it to admiration, or even lecture upon the orrery, yet, within two years after they have left school, are not only destitute of taste for the sublimest of the sciences, but seem not to retain, if ever they have had, any mental correspondence, connecting the technicalities of "the globes," with the wonders revealed to the eye of man in a cloudless night; —for them, a treble tier of vapours might as well have wrapped this ball of ours in perpetual obscurity and ignorance.

It will be far otherwise with young persons who have been intellectually dealt with, and who have obtained an ideal grasp of whatever is, or might be seen in creation. The peculiar cir-

cumstance, bearing upon the culture of the Conceptive faculty, which attaches to the objects of astronomy is this, namely, That the heavenly bodies, or let us now confine ourselves to the planets of our own system, are at once, and in different senses, within the range of the eye, and beyond it. A remote country is purely an object of conception; and whether it be Jersey, or Otaheite, it can be present to the mind only in idea. But the moon, or Jupiter and his moons, with the aid of the telescope, is so brought before the eye, as that the mind keeps a fixed hold of it, while it is spoken of; and yet, as to the scenes which may diversify its surface, it is so remote as to demand the most vigorous effort of the Conceptive faculty to realize them. Now this circumstance is of much significance in relation to the process of culture we are at present treating of.

With the advantage of a clear atmosphere, let the eye be fixed upon a hill side, fifteen or twenty miles distant, and with which, and its objects, the spectator has already become familiarly acquainted, and able therefore to fill up, in all their details, the hazy outlines, and to fancy much more than he can discern of houses, churches, knolls, hedges, and rocky points. Now, in thus bringing the conceptive power to bear upon a cluster of objects, dimly seen, it receives a partial aid, which in a singular manner enhances the faculty itself, and uses it to a degree of pre-

cision and vividness that confers something like ubiquity upon the mind, enabling it to transport itself, with the velocity of light, to any scene which it possesses the materials for imagining. After practising the eye, and the mind, in this conjoined manner, upon a remote object, known by previous and near acquaintance, the next exercise is to direct the eye to a similarly situated eminence which has never been actually visited. This is a different kind of effort, and of course is more liable to vagueness of conception: it will however lead the mind on, if frequently repeated, so as to impart still more intenseness and vivacity to the conceptions of things not seen.

Now it is only an extension of this same habit or power, which we propose to effect in relation to the celestial bodies; and this sort of training, if persevered in, imparts a general activity and energy to the mind, which will make itself manifest in every other intellectual operation; for there is no process of thought that does not ground itself, more or less remotely, upon the Conceptive faculty.

The moon, a day or two short of the full, or as much past it, affords the best opportunity for this sort of exercise. The moon, let it be said, is—a mountain, only somewhat more distant from the earth than Snowdon is from the Cheviots, or than the Irish coast is from Cader Idris. The moon, seen in her gibbous state, through a good telescope, is readily perceived to

be rotund, and the mind has grasped its object the moment when that which had been thought of as a disc, is seen to be a globe. The meridional, orange-like ridges of the moon's surface aid the eye in this effort. Then, after a familiarizing lecture has been given, embracing all that is known, or well-conjectured, concerning the physical condition, or geology of the moon, and drawings have been shown of its circular or volcanic pits, of its protruded chalky strata, so resplendent at certain points, and of its crescent ridges: the telescope is again resorted to, and the very objects are exhibited that have been spoken of and represented. If the first beam of sunlight upon a lofty lunar crag is watched for, and the spreading of day adown the mountain side is seen until the cone join the plain whence its rises, the mind, thus aided to a certain extent, and then left to go on by itself, acquires—what we are now intending, a vigorous mental ubiquity—a trajectile force, leaping the voids of the universe, and anticipating, in some degree, powers not yet granted to the human spirit.

A further exercise will be, with a careful regard to the facts of the case, and which a moderate acquaintance with science supplies, to carry the young spectator out to the moon, and to aid him, by descriptions and representations, in imagining the magnificent appearance of the Earth, as thence seen—with her visibly quick

revolution, her nebulous streaks, her snowy poles, her sombre ocean expanses, and the blotches that mark her volcanoes. This is an exercise essentially differing from that lately spoken of, in regard to the earth.

The mind has advanced some way beyond its mere perceptions when it has clearly discerned the sun's globosity, which is a much less apparent fact than that of the moon. But the telescope, with its stained eye-glass, affords us the aid we need for this purpose, first by shearing the dazzling orb of its superfluous beams, so that it may be steadily looked at; and next, by discovering the spots, which do this, by showing a perspective as they approach the verge, and by their curvilinear path across the disc, parallel to the sun's equator, as observed several successive days. By these means the sun's real figure offers itself, if not to the eye, yet to the mind, and a surprising accession of conceptive power results from so simple an advance as this. In truth the teacher will find, in a hundred instances, that, to embolden the Conceptive faculty has the effect, beyond what he might have supposed, of invigorating, not this faculty alone but every other.

The solar spots should, in like manner, be looked into, so as to carry the mind through the phosphorescent atmosphere, or strata of fiery tempests, and land it upon the terra firma

beneath. To aid this operation, let a wooden ball, painted of a dark colour, be coated, first with a distemper ochre, and afterwards with a bright yellow: then, with a broad wooden point, let spots of the coloured coatings be taken off, in imitation of the solar spots, then happening to be visible. A ball thus prepared exhibits the actual construction of the atmospheric strata, as indicated by the spots, and will show the three surfaces—of the sun's non-luminous body—of its reflecting under stratum, and of its resplendent upper stratum.

Now in all this, it is not so much the teaching of astronomy, as the invigoration and replenishment of the prime faculty of the mind, by the aid of astronomical facts, that we intend. An endeavour may be made, with this view, to put the mind into possession of the celestial distances; or at least to impart something better than the vague notion of the heavens as a dome spangled with shining points.

This may be attempted by means of a gradual extension of the sight from nearer to more remote objects, which are at known distances, one from the other, and from the spectator; as thus.—The learner is directed, we will say, to look at a farm house, and a windmill, on the nearer horizon, and three miles apart one from the other. Next, if the locality allows of it, let a three miles be found, marked by two conspicuous objects, and situated on an horizon twenty

miles distant; or let the same angular distance be carried from the nearer to the more remote horizon, and the actual interval be ascertained by reference to a county map. If by these means a notion has been acquired of the diminution of objects or intervals by distance, the question may be put—Now can you imagine how six hundred miles, measured from the Lizard Point to Pentland Firth, would appear, if you could bring both extremities of the British main at once within view? Hardly. Yet I will show you much more than this—I mean a full two thousand miles, and rather more, stretched out before you!—Where? how? —Look at the moon: the measurement from tip to tip of her horns is, 2160 miles. But we may see, at once, much greater distances than this. Just as the sun is setting, look from the point of the horizon where he disappears, to Venus, who is now at her greatest elongation; there then is a distance of sixty-eight millions of miles, spread before you, just as the three miles, between the farm house and the mill, is also extended.

This sort of exercise is easily diversified by reference to the other celestial bodies; and so, by the aid of vivid verbal descriptions, well-constructed drawings, and the telescope, the minds of young persons may be used to the pathways of the heavens, and be made familiar with the scenes of wonder which strict science

(fancy apart) leads us to attribute to the surfaces of Jupiter, and of Saturn; and thence onward to the stellar systems. We thus at once occupy the mind with the stupendous facts of astronomy, before its technical elements are meddled with; we engage the purest tastes, and impart, by use, a vigour to the Conceptive faculty, such as promotes general mental superiority and intellectual power.

If a good telescope be at command, and if, by frequent and progressive conversations, the minds of children have been prepared to look at what is shown them with a grasp of thought, a sudden view of the Pleiades, or, if the instrument allows it, of some of the stellar nebulæ, will be found to produce a powerful impression on their imaginations. And in conducting this sort of exercise, two purposes are to be kept in view, and to be blended; the first is that of familiarizing a little the stupendous magnitudes and distances of the visible universe; and the other is that of founding, upon such familiarized conceptions, those elevated emotions which favour the religious sentiments. Not only are these two purposes separately important, but they are so as dependent the one upon the other; for there is a vague awe, connected with the starry heavens, which, when it comes to be supplanted by scientific notions, is not unlikely, as appears unhappily in frequent instances, to be superseded by a feeling absolutely irreligious. But so lamentable a damage to

the moral sentiments should be precluded, if possible, by combining, from the very first, precise conceptions with just moral impressions. The atheism of Laplace is not likely to gain admittance along with his theories if, before these come to be known, the mind has already associated its feelings of devout admiration with the substance of the facts on which those speculations are founded.

To recur to the instance of the Pleiades; or to some of the globular systems of stars:—when the telescope has brought before the eye, instead of a confused twinkling, as if of a dozen luminous points, the clear steady splendour of thousands and thousands again, constituting a flaming community of suns, within the range of which there can be no darkness at all, but a perpetual glory, radiating from innumerable sources; when this idea has been vividly realized, and when the actual remoteness of the scene has been lost from the recollection, some such train of thoughts as the following may be suggested.—Let us now imagine ourselves the inhabitants of one of those suns, surrounded on every side by ten thousand effulgent globes, and beholding every where so much more of life, power, and enjoyment, as may be thought to belong to such a system: and let us then suppose that there were to be described to us some such dim region of the universe as the one we actually occupy, where there is but a single source of light and

heat; and this one far remote from us; and where a half of all time is given to darkness and to cold;—where life and pleasure are diminished a half by night, and a half by winter; should we not be apt to think of such a system as if it were thrown beyond the boundary of the Creator's care, and had been excluded from the circle of his presiding goodness and wisdom? But now, in contradiction to any such supposition, let us only apply the microscope to the minuter objects of the animal or vegetable kingdom, and contemplate the perfect workmanship, the high finish, and the wise and beneficent contrivances that so conspicuously belong to the very smallest, as well as to the most bulky classes of plants or animals. To the eye of reason, the divine attributes are as surely and as plainly indicated in the physiology of an animalcule, or a lichen, as they could be in the counterpoise and magnificence of a hundred thousand neighbouring suns. The proof is precisely of the same sort, in both instances, and the argument is as good in substance, whencesoever it may have been derived. The gnat, born to die in a day, in this wintry world of ours, gives evidence of the very same qualities of the creative mind which are, or may be evinced, by the undying energies of the beings of a perennial summer world. Whether he bestows more or less, God the author of life, is present, and is at work, wherever there is

life; wherever there is matter, motion, and form.

The purport of the methods I am now recommending is to get possession of the mind, first on the side of its conceptive powers; and to establish vivifying associations between the sublime and beautiful in nature, before that which is merely technical, or that which is abstruse or ratiocinative has been much, if at all thought of. The difference is great between minds, equally intelligent, the one of which has come early into correspondence with whatever in the universe may be conceived of, while the other has conversed only, or chiefly, with the arbitrary and artificial aspects of things. Even in relation to technical learning, the terms and the theorems are much more firmly held, and distinctly understood, when what they relate to has already been clearly understood in its inartificial form.

We now go back to our starting point—this planet of ours, and take a turn among its organized species. And here again we are to make a choice, as to the method of proceeding. If the mere memory is the first of the faculties to be cultivated, and if then the reason is to be drily exercised, we may go on in the accustomed path of consigning scientific rudiments, nomenclatures, definitions, classifications, to the encumbered brain. But we have supposed a different

principle to have been adopted, and that the faculty which nature first sets in movement is the one which education is first to aid, and to furnish with materials.

An initiation in botany and natural history, if adapted to the principle we now recommend, will be purely of a descriptive kind; and not only descriptive in its style, but designedly select, instead of being systematic in its instances: as for example, a systematic method, whatever may be the principle of the system adopted, enjoins that the fixed characteristics of orders, classes, genera, species, should be pointed out, and that the learner, from the commencement, should be qualified to detect them, under all varieties of appearance; and that specimens, in attestation of the principle so assumed, should be collected, irrespectively of any accidental circumstances of the species, which may be adapted to awaken curiosity.

But in place of any such method, I would glean from the vegetable and animated orders, of all climates, whatever recommends itself, the most strongly, by its fitness to fix itself in the imagination. Nor must we lose sight of the fact that the mind is much aided in its individual conceptions by the simple circumstance of the actual juxta-position of things, and their local concomitance. Thus, for example, to study natural history in its several branches, on the principle of bringing together things which

really meet the traveller's eye in the same scenes, imparts far more of vividness to single ideas, and gives much more of richness to the mind in general, than is done by considering objects nakedly and disjunctively, in their scientific relations. Thus I would paint upon the fancy the natural history — vegetable, animal, and mineral, of Lapland, as a whole, of Siberia, as a whole, and so of Brazil, of India, of Africa. This method vivifies the mind, and is consonant with the laws of its natural development; but to discourse of the whale and of the ape, of man and of the kangaroo, as associated by an abstruse point of analogy, is a process proper indeed to a later era of education, but utterly improper, as I think, to its earlier stages.

The faculties afterwards to be cultured will work with far more readiness, and reach results with vastly greater rapidity, when thus richly furnished with materials, and when all these materials are associated with agreeable impressions. The opposite practice, which has prevailed so much in education, of commencing by the rudiments of the sciences, is to be attributed, in part, to the prejudice, so besetting to some minds, of paying more regard to logical order, in the conveyance of knowledge, than to the order of nature in opening the faculties; and partly to the facility of imposing a drudgery of tasks upon the learner, as compared with the animated method which, in rendering the learner's task

more agreeable, requires a little more effort to be made by the teacher. There are some who would rather be at the pains of carrying forward the most rigorous processes of instruction, than find themselves called upon, every day, and every hour, to convey various information, in a vivacious manner.

It will be easy to advance from the natural history of countries, to the characteristics and manners of the nations occupying them; but on this ground we want something altogether unlike the dry bones—the statistics, the colourless bird's eye views, usually contained in elementary books, intended for children. There may indeed be works which I have not been so fortunate as to meet with, proper for our purpose; but in default of such, the teacher must rely upon his own knowledge of facts, and his command of language; and instead of requiring children to listen to, or to repeat, what they will forget as soon as they can, and what can do them very little service while they may chance to remember it—as that 'Iceland is situated between the 63d and 67th degrees of north latitude, and the 12th and 25th degrees of west longitude; is 280 miles in length, and 180 in width; and that its population, according to the last census, is 53,000;'—and so forth; instead of this, let the scenes, the occupations, the habiliments, of an Iceland family, during their few summer days, and then during their long wintry months, be

graphically described (and with an admixture of humour) aided by the best pictorial representations that may be at hand. Descriptions of this sort, illuminated by the pencil, and vivified, when the means of doing so are available, by poetic extracts, will never be obliterated from the memory: and if this same method be carried forward, round the globe, the result, especially with children of vivacious minds, will be a general invigoration and enrichment of the faculties, apparent ever after in almost every sentence that is written or uttered.

Whatever might now actually be seen, could we borrow the wings of the morning, is the proper subject-matter of the earlier processes of instruction. To this succeeds, or the two may be attended to simultaneously—whatever would meet the eye, could we sail up the stream of time, and set foot ashore, where might be contemplated the wonders of ancient Egypt, ancient India, ancient Greece, Rome, Judea; and then, of the European kingdoms, at chosen points during the course of the middle ages. Nothing, altogether, so well as history, subserves the purpose we have now in view; but then by history I do not intend a summary of the series of events —a calendar of kings and generals—a list of the dates of battles and treaties; but just such a description of places and of persons—of modes of life and usages, long gone by, as we have supposed to have been already given of the same class of objects, now extant.

History for children requires, from beginning to end, to be written anew. Nothing is gained by condensation in conveying this sort of instruction: what we want is the very contrary, namely —amplification: but then it is not the amplification proper to erudite antiquarian memorials; but that which, first selecting whatever is most striking in incident or scenery, and most characteristic too of the people or of the times, spreads it, in bold outline and strong colours, upon a broad canvass. The requisite means of illustration, as to costume and scenery, are now more easily had than at any time heretofore; and the well-informed teacher may, without much preparatory labour, be in position to hold forth to the mind's eye the very picture of the principal events on which the fortunes of mankind have turned.

The TRUTH of history is always found to be a powerful recommendation of it, with children; and if it be thus conveyed in a vivid form to the conceptive faculty, it may supersede fiction, or weaken the taste for it. Moreover, when history is so taught as to lodge it firmly in the imagination, it has this peculiar property, that it quickens the moral sentiments, and is a means of effecting an association, highly important, between the moral emotions, the imagination, and the reason; and this assimilation of ideas is effected, not by formal attempts to bring it about; but by that purely spontaneous process which goes on in the mind

when certain scenes are presented, embodying such and such elements of our moral nature.

Nothing can be much more stupifying or superfluous than the interlarded solemnities of moral inference which swell some books of history, intended for young persons. The well-meant but futile—"Hence we should learn," and "how important it is ever to remember," answer no purpose whatever in education, except that of giving the *congé* to the minds of children, whether as auditors or readers: it is a—"now you may go, while I preach." The efficacious mode of instilling moral principles, as suggested by the history of nations, is, at choice moments, and when all minds are seen to be in a plastic mood, to drop the word or two of practical inference, to enounce the single, pithy, well digested sentiment, which, by its natural affinity with the excited feelings, at the moment, shall combine itself with the recollected facts. Nothing more perhaps need be said in reference to the conveyance of moral feeling or principle, than what is implied in the very word—*instilled*. Religion and morality, and especially as corroborated by history, are to be instilled, not administered in stifling potations, or drenches of wisdom.

Along with so much continuous narrative as may serve to give coherence to children's ideas there may, with advantage (in regard to the conceptive faculty), be mingled what may be termed historical portraits, not indeed of indi-

viduals, but of classes of men, and of those classes which have had existence through long periods of time, and which are rarely made to figure, in a distinct manner, on the pages of history. Thus we should present, in succession, and actually pictured, as well as verbally described—the Egyptian Pharaoh, and his magicians—the Persian Mage, and the Cyrus (the Shah of three thousand years ago); then the heroes of Homer's romances, and the real warrior-statesmen of Athens, Sparta, Thebes, Macedon. Next, in solemn procession, come the Ptolemies, and the Antiochuses; along with the Jewish Pontiff, and the Rabbis. The consuls, the dictators, the orators, and the emperors of Rome, first western, and then eastern, bring up the train of the dramatis personæ of ancient history. In more lively and picturesque guise, advances the troop of European actors, including the popes, the abbots, the monks, the bishops, the barons, and the Scandinavian chiefs; the knight of the Crusades, and the Templar, with his companion Saracen; the bard and troubadour, the pilgrim, the bourgeois, the buccaneer; and the more modern representatives of each.

No philosophizing, no continuous moralizing, no rudiments of political or economical science; nothing but painting to the mind's eye, and actual painting to the bodily eye, should belong to this first conveyance of history. So conveyed, it becomes to the mind an unalienable and inex-

haustible opulence, and when, in due time, it comes to be wrought upon by the severer faculties, it yields its sixty and hundred-fold of substantial wealth.

I feel some embarrassment in attempting to say any thing on the subject of FICTION, as a means of education, partly on account of the real difficulties that attach to the question, in a practical view; and partly in regard to the respectable prejudices (or perhaps well founded fears) of scrupulous and religious parents. And by Fiction, in this place, I do not mean the fable, occupying half a page, and allowed by all to be innocent enough; nor the story-book, put into the hands of children for their diversion in a rainy day: but the more elaborate form of fictitious narrative, in which the persons of the story are kept in sight long enough to generate a mental acquaintance, and to excite vivid sympathies; and in which a plot is slowly developed, so as to enchain curiosity, and excite powerful emotions. As to the brief apologues in which Reynard and Grimalkin are hero and heroine, or the edifying history of Master Charles Steady, and Miss Fanny Fretful, there need be no question about them: the difficulty before us relates to compositions of a higher order, and to which children, under their twelfth year, or indeed at a much earlier age, will listen with breathless attention. I do not know that I have read Don Quixote

since I heard it at five years old, as one of an eager circle, the eldest not thirteen; yet I retain a very vivid recollection of the incidents and characters, and could relate most of the knight's adventures.

It is indeed found, as I have already said, that truth is a great recommendation of a narrative to children: and also that History, graphically conveyed, may supersede the demand for fiction; but it is also true, nor should the fact be concealed, that the vivid emotions excited by elaborate fictions give a stimulus to the conceptive faculty, altogether of a peculiar kind, and such as should not be absolutely excluded.

In apology for allowing rather more indulgence in this way than some may think to be safe, I would say, in the first place, that mere novels—love stories, whether better or worse, are utterly, and without exception excluded from my present intention. If any advantage might be derived from works of this stamp, the injury and the peril decisively outweigh the possible benefit: so far I have no controversy with the most rigid exclusionist. In the second place, I would remind parents of the great principle, to which too much importance can hardly be attached, and which I will run the hazard of repeating once oftener than the reader may think necessary—That safety, in regard to the moral and religious sentiments of the young, is not to be insured by the passive method of shutting out all knowledge of, and

contact with, evil; but must be sought for in the conveyance of POSITIVE and ACTIVE principles, such as may repel evil when it is presented with powerful recommendations. Education, let us never forget, is not a negative, but a positive process; and as to the heart, what we have to do is more to fortify virtue, than to screen innocence.

The question concerning the use of stimulating fictions must turn greatly upon the practices, the moral economy, and the tone of a family; that is to say, if young persons are in a lax moral and mental condition—if they are dealt with in a slovenly, variable, and infirm manner; then fiction will be dangerous to them, and may probably be subversive of their better tastes, and perhaps of their better habits. But it is otherwise with those who are soundly and vigorously trained in whatever is pure, just, true, and rational. Such might, with entire safety, be allowed to read or hear every one of the classic fictions of modern literature (love romances excluded.) In my own boyhood I heard rather more than would be embraced by this rule, and yet am not able, in a careful review of all the influences that have left a trace upon my mind, to assign any evil consequence whatever to this source: the fictions I read or heard, operated simply as a powerful stimulus, addressed to the conceptive faculty.

Telemachus no one would exclude: in truth this romance seldom, I think, excites any very

lively feeling in young minds; and it is to be considered as a history—lacking actual historic truth. Robinson Crusoe, again, stands exempt from reprobation, I suppose with all. A great merit of this unmatched book is that, although a sound moral feeling pervades it, the author does not take any high moral aim; he is not labouring to establish, or to enforce, a particular principle (a circumstance which spoils a little, Sandford and Merton;) and it is very desirable that the serious and weighty matters of morality should be associated always and only, with what is true and real. I would much rather give admittance to a *non*-religious, than to a religious fiction; for the one is likely to leave momentous principles where it found them; while the other will probably relax, distort, or confuse them. De Foe, if he had deliberately aimed at the production of a work the most proper imaginable for supplying a mild, salubrious, and yet vivid excitement of the conceptive faculty, could have done nothing more complete than he has actually done, in Robinson Crusoe. The quaint simplicity of the style, the homeliness, the *commonness* of Robinson's sentiments, and the *mediocrity* of the character, in every sense, all these qualities of the narrative are precisely what we should have wished for, with an intention such as I have stated.

Every boy sets his own foot, step by step, i the prints of Robinson's shoeless foot; and

therefore mentally surrounds himself as he goes, with the scenery and circumstance of the story. This work, no doubt, has so quickened the conceptive faculty, in hundreds and thousands of instances, as to have greatly vivified the European mind, and to have animated the literature of our own and other countries, since its universal diffusion. The Arabian Nights' Entertainments, and other oriental tales, might come in as having an influence over the imagination, directly contrasted with that exercised by Robinson Crusoe: the one kind of fiction moving the mind by its tone of reality; the other by its remoteness from reality; or at least from the realities of our own times and country.

Miss Edgeworth's admirable fictions have a merit of a kind analogous to that of De Foe's, and they possess the recommendation too of embracing only the lower tables of morality, and of rarely meddling with that which fiction should not dare to touch. It were however to be wished that less prominence were given in them to mean, false, and malignant characters. To some children the Parent's Assistant would convey a poison. Gil Blas, Don Quixote, and Gulliver, can only be read to young persons, on a plan of careful selection. Each has a peculiar power over the imagination, of which we may avail ourselves, with necessary discretion in the mode and quantity. Of Shakspeare another sort of use, hereafter to be spoken of, may be made; we need not

therefore encumber ourselves by any difficulties regarding him, at this stage of our progress.

I have sometimes wished that the author of the Waverley novels had enriched our literature by some dozen of Waverley novelets; that is to say, brightly coloured, and authentic fictions, embodying the scenes, persons, and transactions of European history, in a form such as should lodge them, boldly and indelibly, in the minds of young persons: the Tales of a Grandfather do not precisely meet my idea in this view. How far, or in what instances, the actual romances of this great writer may safely be had recourse to for these purposes, is a question I do not wish to grapple with. Certainly I could find no fault with parents who should interdict them, one and all. It may however be remarked that Sir Walter Scott's poetical romances are liable to much less suspicion than his prose; for narrative in verse does not work its way so deep into the soul as narrative in prose. The writings of Florian are too vapid to be of much avail in education; while those of Marmontel are open to the gravest objections. After all, it is certain that, if fictions be altogether excluded, history, and its rich materials, properly employed, leave little that is really important to be wished for.

Those who may be disposed to banish fictitious narratives from the school-room library, are likely also to use their endeavours for repressing that disposition to invent and enact romance, and the

petty drama, which shows itself in all children of vivacious tempers. For my own part, I should be slow to interdict any thing which is seen to spring generally, if not universally, from the spontaneous development of the faculties; and it is certain that children of active minds invariably create for themselves a large portion of their daily felicity in this manner. It is this romancing which gives its inexhaustible charm to the baby-house, and which, in the eyes of the little mistress of the mock establishment, imparts life and action to the wooden, waxen, and bran-stuffed personages that crowd the kitchen, the parlour, the drawing-room, and the chambers: all would be nothing, shorn of the ideality which imputes life to these symbols. And it is this same romancing, carried on out of doors, which animates the labours of the little fellows who build the earthen fort, man it with pasteboard Saracens, assailed, amid the thunder of pop-guns, by pasteboard Crusaders. Childhood—happy, high-toned childhood, is all IDEALITY: Nature herself makes it so; and it is a very questionable proceeding to come in, with our logic-born wisdom, to spoil all this sport, and to say, "I cannot allow you to *fancy* what is not true and real." For myself, I dare not theorize at any such rate, or take so much upon me, as is implied in countervailing so strong a current of the human mind. Ideality is not an accident of childhood, or a habit, fallen into by some chil-

dren; for it is nothing less than the warp and the woof of the first years of life; and so far as I have observed, children, so far as they are deficient in ideality, are either stupid, or malignant, or sensual, or all three together. It is also a well known fact that the finest understandings, and the noblest dispositions have been distinguished, in childhood, by the richness, force, and exuberance of this element of our nature.

Some sober-minded parents may probably think that great hazards are run by indulging, so far as is now proposed, the conceptive faculty; and by bestowing upon it the culture which I am recommending. But I seriously believe that the dangers apprehended are likely to be warded off, or superseded, rather than enhanced, by enriching the mind in this very respect. To preserve the purity and health of the imagination, we should not quash it, but occupy it, with whatever is bright and fair. The more ideality a child displays, the more strenuously would I pursue the methods of culture hinted at in this chapter; and I would lodge the visible universe, in all its gay colours and graceful forms, in a mind whence especially I wished to exclude objects of morbid influence.

In what instances it may boldly be asked is safety to be found in neglect, or in any merely negative measures?—Surely not in the treatment of a prurient imagination! The children of the labouring classes, accustomed only to the rudest

modes of life, and inured to toil in the open air, are rarely if ever the victims of the mental maladies now referred to. But with those of delicate habits, and who pass too many of their hours in warm rooms, the instances are not rare in which serious evils, affecting the moral habits and future conduct, are to be guarded against. Now these are the very cases in which the conceptive faculty, should, as I think, be the object of particular attention; and in such instances it will be advisable, while what is the most exciting —that is to say, actual fiction, or romance, is kept out of view, to bring forward, in its room, the brightest realities of nature and history. Especially if a taste for natural history can be formed —animal and vegetable, with the delightful concomitants of the practice of drawing, and of the busy engagements of preparing and enriching the hortus siccus, and the museum of specimens, with its shells, butterflies, sea-weeds, and what not—if this can be done, the dangers we fear are not unlikely to be averted; for it is a rule that the most efficacious antidotes are those prepared from elements homogeneous with the malady that is to be cured.

But in relation to the bearing of the conceptive faculty upon the moral condition of the mind, it may be observed that some dangers are excluded, and a healthful activity of the mind is likely to be secured, simply by bestowing proper attention upon the alliance of the imagination with language.

The establishment of this connexion, besides its importance in relation to the intellect merely, is the natural means for preventing vague involutions of the imagination upon itself. Let moral and religious means of discipline be assiduously employed for the preservation of the mind's sanity and simplicity: meantime the experienced observer of human nature, who looks to the working of the faculties one upon another, will not fail to put in movement those springs of action which are likely to carry the mind sheer over the quagmires of corruption, with unconscious velocity.

There is another, and a most important office of the conceptive faculty, of which I have not yet spoken; but which is so intimately connected with moral treatment that it would be difficult to give it the consideration it demands without forestalling what should be said in treating those subjects. What I now refer to is that power of the mind which enables us to realize, in our own bosoms, the emotions and moral consciousness of others; and so to put ourselves, mentally, into their position, as to take up their sufferings or their joys as our own.

It is upon this sympathetic power that the moral system hinges: it is the conceptive faculty, employed upon the affections and emotions of the human bosom, and set at work, in each instance, by our witnessing or hearing described certain events or circumstances, affecting others, which,

by a reference to our own feelings, we can readily imagine as they would affect ourselves. Hence arise those various and powerful emotions of sympathy which impel us to acts of benevolence, and which are the springs of conduct in almost the entire circle of our social relations.

A vivid conceptive power, in relation to the sufferings of others, is the prime element of the philanthropic character. Often enough we may meet with those whose feelings are humane, and who will act generously, if only, by the aid of some unusual circumstances, one can get them to realize the woes and wants of the wretched; but the conceptive faculty is itself so torpid with such persons, that ordinarily, no heed is taken of what others may be feeling. Selfishness, which sometimes is a deliberate and odious preference of our individual wellbeing to that of others; is often only, as to its cause, a torpid or callous imagination. The HOWARD is the man whose imagination puts him into the very place of the unhappy, and who labours to relieve the distress he knows of, as if it were actually pressing on himself. It is, moreover, a modification of the conceptive power, which generates that sensitive regard to the feelings of others which distinguishes the well bred man; and it is the want of this species of Ideality that makes the low bred man an annoyance in society. It is in great degree because the conceptive faculty much more readily repeats to itself the feelings

of those who are always about us, than of strangers, that the vivacity of the parental sympathies so vastly exceeds, in most cases, the measure of general benevolence, in the same persons.

Many familiar illustrations of this principle of human nature might readily be adduced, and some such will no doubt occur to the reader's own recollection. It would however be impracticable to enter upon the subject with any advantage, apart from what belongs to Moral and Religious education; and rather than injure so momentous a theme by a hasty and incidental treatment of it, I omit, or postpone, much that might have been included, as bearing upon intellectual culture. It is to be presumed, however, that no parent or teacher—at home, will lose sight of so main a part of the business of education, or fail to embrace all proper occasions for cherishing a faculty in default of which active virtue can hardly exist. The minds of young persons had better be left void of every thing, than be destitute of the power and habit of transferring the consciousness of other minds to their own.

CHAPTER X.

CULTURE OF THE CONCEPTIVE FACULTY IN CONNEXION WITH LANGUAGE.

WHILE months and years are consumed in stocking the memory—often to be dismissed from it immediately afterwards, with whatever is the most recondite, and the least available in the learned languages, too little attention is given, if any at all, to Language—considered as the engine of the mind's operations, as the record of its stores, and as the index to whatever is cognizable by the external or internal senses.

But it is in these latter respects, beyond any others, that the study of language may be made a gainful one, affording also much agreeable excitement, and tending directly to augment intellectual power. In the same time that is occupied with the bootless labour of teaching common

minded boys to construct pentameters,* what might not be done towards giving the mind a command of itself, and of its stores, by the study of language as the instrument of thought, and as the record of the myriad elements of our consciousness!

So far as the narrow limits to which I am restricted will allow, I propose to suggest hints for conducting the study of language on the principle here adverted to; and it must be remembered that there is, in the first place—a study of language, as it is related to the conceptive faculty; then another, as related to the power of abstraction; and again another, or at least a modification of the preceding, as connected with the art and science of Reasoning, in its several kinds; to which may be added the more ordinary study of it, with a view to philology and literature.

In treating of Language, as related to the conceptive faculty, we have to do with the descriptive portion of it only; or those words, whether verbs, adverbs, adjectives, or substantives, which signify such properties and accidents

* I would not be misunderstood:—Let the refinements of classical learning be cultivated with all zeal after the mind has received the more important elements of its education; and by those too, whose natural tastes are such as assimilate with studies of this kind. What I would denounce (or at least exclude from the scheme and practice of Home Education) is—the putting the refinements of classical learning in the place of rational culture; the too early introduction of them; and the imposition of them at all, on ordinary minds.

of things as are cognizable by the senses. And here, that we may not embrace too wide a field, we exclude for the present, whatever belongs to the interior perceptions, or sympathies, and to the moral sentiments.—Let us suppose that we know of nothing but what is visible, tangible, audible, sapid, or odoriferous. It will be easy to extend the explication of our principle to the more recondite class of objects.

Two methods then are before us, when we have it in view to extend and confirm the connexion between language and the conceptive faculty; and the first of these is the one which naturally comes into use while pursuing that course of descriptive instruction that has been sketched in the preceding chapter. The teacher, whether the actual objects he is speaking of are before the eye, or are graphically represented, or are merely embodied in language, and realized in the fancy, will remember that it should be his aim, not only to convey a clear, and vivid notion of those objects, and which he might effect perhaps by a few well chosen words; but also to establish a connexion in the minds of his pupils, between these objects and the entire compass of those descriptive terms that might be associated with them in the way either of resemblance, contrast, or negation. For an example, and a better does not immediately occur to me, we might take Southey's ingenious accumulation of descriptive participles, in the well known verses

entitled, "How does the water come down at Lodore?"

Now with the aid of a view of the Fall, a very few sentences might suffice to convey a general idea of the scene, as it affects the eye and the ear; and this would be enough if we intended nothing further than to lodge the image, and its accompaniments, in the mind; and if any natural water-fall has actually been seen by the learner, then a condensed description, graphically characteristic, is the best mode of conveying an idea of any other cataract. If the falls of the Clyde, and the fall of Lodore, have been visited, then a few words may be better than many for describing Montmorency, Rinkanfos, or Niagara.

But after as much has been said as just satisfies the conceptive faculty, in its efforts to realize the scene, and what approves itself to good taste, as to the choice and collocation of epithets, then occasion may be taken (leisurely, and at different times) to assemble around this scene, every other term in the language we can think of, which, by right of affinity, analogy, or opposition, might fairly claim a place in a description of it. Now this is done in the often repeated verses, above referred to; for about a hundred and fifty participles are strung together, in these jingling stanzas, and there are scarcely three of them that can well be objected to as improper to the subject, or as violently

twisted from their ordinary import. And so it appears that the impressions on two only of the senses—sight and hearing, made by the precipitous descent of a body of water, are reducible to a hundred and fifty, or more, distinguishable elements, each of which, as denoted by an appropriated term, holds a place in the mind, and may be thought of by itself. But then to these hundred and fifty terms might be added, in the way of opposition, contrast, or negation, nearly as many more. Indeed, as the descriptive words, assembled in these verses, relate principally to motion and sound, the number might be greatly increased by adding those which convey ideas of colour, light and shade, and form.

A good exercise, with the view of assembling the contrasted terms, might be found in describing the sullen majesty of the Ganges, in its course through the jungled swamps of Bengal; and the materials for such descriptions are at hand in every library. But it should be remembered that, whereas, in geographical descriptions, such as those recommended in the last chapter, the precise intention is to bring the scene vividly before the mind, in the most concise and appropriate terms, the intention in the present case is to accumulate, or may I say, to conglomerate, words and phrases, so as to familiarize the mind with the *copia verborum*, as related to any particular aspect or accident of visible nature. It is another, and a later work, so to instil the prin-

ciples of good taste, as shall serve to reduce, within due bounds, a too florid or exuberant style. A chaste style is not to be obtained by stinting the mind in its materials, or by chilling the fancy; but by training it to command its conceptions, and to husband its resources. What we are now about is the process of accumulation, apart from which the maxims of severe taste apply to nothing that is positive, and are brought in to regulate—inanity.

It cannot be necessary to specify the many objects and scenes of nature which may be made use of in furnishing the sort of exercise now contemplated. If any of those descriptions of volcanoes, stalactite caverns, mountain passes, forests, deserts, and oceans, which are at hand in all collections of travels, are assumed as the material of the exercise; then the learner may exhibit his ingenuity (when of an age to make the attempt) in re-writing a given description, substituting, wherever it can be done with propriety, other terms for those which he finds before him. Let him follow his original, step by step, sentence by sentence, word by word; replacing each by an equivalent, or by two or three, equivalent to the one; or by one, condensing the power of two or three. It may seem superfluous to exemplify so easy a process; but I will give an instance, taken at hazard, from a description of a night on the Grands Mulets.

It was a brilliant night. Beneath a dark and cloudless vault, the snowy mantle of the mountain shone resplendent with the beams of a full Italian moon. The guides lay buried in the deepest sleep. Thus in the midnight hour, at the height of ten thousand feet, I stood alone, my resting-place a pinnacle of rock that towered darkly above the frozen wilderness from which it isolated rose. Below me, the yawning clefts and uproarious desolation of the glacier presented an appalling picture of dangers scarcely gone by. Around and above was a sea of fair and treacherous snow, whose hidden perils yet lay before us. I saw the chain of Jura, and the distant top of many an unknown alp—an earnest of the prospect from still more lofty regions. Yet among them Mont Buet's white dome, a warning monument of Eschen's fate, forbade the attempt to go up higher. The vale of Chamonix slept at the mountain's foot, and, now and then broken by the deep thunder of an avalanche, the profoundest silence reigned. It seemed the vastest, wildest, sternest of nature's prodigies, reposing,—now starting as in a fitful dream, then sinking again into the stillest calm. The influence upon my mind of that poetic vision of the night I must despair of ever being able to communicate to others, and yet the scene itself lives, a picture in my memory, standing alone, unalterable by time . . . It was past four o'clock. Orion shone where the full, and now setting moon, had beamed three hours before. Soon the mountain top became a pyramid of gold; the delightful token that the rising sun, between which and us the mountain intervened,

The night was resplendent. The mountain, clad in spotless white, glistened against the deep blue of the sky in the light of the moon, then at the full, and such as it is seen in Italy. The guides were in the profoundest slumber; and I stood solitary, at an elevation of ten thousand feet, keeping the midnight watch, on a rocky turret, rearing itself gloomily out of the icy desert around. Beneath my feet lay the gaping chasms, and wild solitudes of the glacier, reminding me of the frightful perils we had just escaped. On all sides, and about the upper path we had yet to tread, was outspread a fallacious expanse of snow. I discerned the ridge of Jura, and many a remote summit of nameless alpine tops—pledges of the view we should command from more elevated spots. Among these, the snowy arch of Mont Buet seemed, in recalling the fate of Eschen, to prohibit our ascent. The valley of Chamonix lay tranquilly at the base of the mountain; while, except as interrupted from time to time by the sullen roar of a falling avalanche, an absolute silence prevailed. The scene offered to the admiring and astounded eye, in solemn stillness, the most stupendous, disordered, and severely grand of the spectacles which nature anywhere presents. At one moment seeming to rush anew upon the bewildered senses, and in the next, subsiding into motionless repose. I can never hope to convey to another mind the effect produced upon my own by that night of dream-like wonders; and yet the images themselves are present to my fancy, as if never to fade or to be impaired. . . . It was past four o'clock, and

had redeemed the pledge given by his departing rays.

now Orion kept the place where, three hours ago, the moon shed her beams. Presently the summit of the mountain glowed in golden splendour, and filled us with the pleasurable assurance that the sun, hidden from us by the intervening height, had returned to realize the hope with which we had watched his decline.

It would be no very difficult task to furnish a second and a third version of some such descriptive passage; even without allowing the structure of the sentences and paragraphs to be lost sight of; for our immediate purpose would not be secured if nothing were done but compose, *ad libitum*, another description of the same scene.

The teacher may make a commencement with single sentences, descriptive of the most familiar objects, and he will not fail to find that the practice, if continued at intervals, and not sternly enforced, enlarges, in a pleasurable manner, the learner's acquaintance with, and power over language, while it brings the conceptive faculty into a well defined alliance with the most significant terms. There is, in such a process, a double, and intimately blended training of the mind, the effect of which is in an equal degree to enrich, and to empower it. The practice of translation from another language, if passages are selected with judgment, may be resorted to with the best effect, as related to our immediate purpose. The learner, when qualified to do so, should take a

floridly descriptive passage, such as may be found in Buffon, or Fenelon, and render it into english, in two versions; then into latin; and if not proficient enough in greek to carry the same passage forward into that language, our purpose, in some good measure, will be secured by his merely looking out the epithets—adjectives and verbs, which would be best embodied in such a translation.

I well know that the teacher of language whose habits of mind fix his attention upon grammatical and synthetical proficiency, will distaste methods such as those which I venture to recommend; decrying them as impertinent, or as likely to withdraw the learner's regards from the momentous matters of syntax and quantity. Be it so: I am intent upon the invigoration of the elementary faculties of the mind; and with this view, holding in abeyance the objections of scrupulous scholarship, avail myself of such means as seem adapted to my purpose—a purpose, surely, that is important. And in this place, I must express the opinion that, in teaching languages, the process would be greatly facilitated by confining the learner's attention, in the first instance, or so far as could conveniently be done, to the descriptive portion of each; this being the class of words most readily taken up by the mind. I grant however, that a method of this sort demands some preparations to be made for carrying it into effect, in the way

both of newly arranged vocabularies, and new selections of readings.

With a description of some impressive scene, in a lively and natural style, as the nucleus of the exercise, four or five languages may be familiarized, at one and the same time, and without implying any more effort, on the part of the learner, than is required in the study of a single language. On the contrary, I believe that the mind is aided, rather than oppressed, by the conveyance, in conjunction, of several sets of words and idioms. But then the entire system of teaching must be natural and colloquial, not scholastic or abstruse. At least the modern european tongues may, with great ease, be thus taught in conjunction; and so many are the points of agreement among them, that the points of difference give rise to little difficulty: and it is evident that, when four or five languages, placed, as we may say, in parallel columns, are compared, the general impression made upon the learner's mind by the analogies, or identical forms, in a view of the four or five, in conjunction, will be so strong as to aid him much in rendering himself master of the peculiarities of each. The english language, claiming cousinship as it does, on both sides, with the northern and with the southern tongues, opens the way to the acquirement of any one of either class. Especially is this true (after greek and latin have been acquired) in relation to french, italian,

spanish, and portuguese, which in fact may more readily be taught and learned as so many dialects of the same stock, than separately and consecutively.

Thus far we have spoken of that correspondence between the conceptive faculty and Language which is promoted, in an inartificial manner, by the mere use of its descriptive portion, while it is employed for enriching the mind with ideas of the various scenes and single objects of the visible world. And if this process be pursued in the two modes above mentioned, that is to say, first, in the way of well-selected and concise descriptions, and secondly, in that of the accumulation of kindred terms, we shall go near to comprehend the entire vocabulary of the language, as related to the objects of sense.

But there remains a process of another sort, and highly useful, as well in relation to that command of language which we wish to insure, as to the enrichment of the conceptive faculty. To explain what I now mean, I must remind the reader that the vocabulary of words (whatever may be their *grammatical form*, and which is accidental merely) relating to the visible appearances and sensible properties of the external world, is, if we speak of it in a mass—a RECORD of general facts, cognizable by the human mind, through the senses. And whereas no one human mind, however nice in its perceptions, or exact

and excursive in its habits of observation, ever takes account of more than a portion, and probably a very small portion, of the sensible qualities and shades of difference which are actually cognizable by man, a copious and refined language, such for example as our own, contains the recorded notices of thousands of minds, and of minds of all classes, and of all degrees of precision.

Thus for example: if the most frequently used words, or epithets, of a language are taken as representing the broad perceptions of the mass of mankind, and as sufficient for all ordinary purposes of description and narration, there yet remain, in reserve, several sets of terms, representing the more exact, or more penetrating perceptions of minds whose faculties have been exercised and sharpened by peculiar pursuits, or by the habit of admitting intense sensations. One such set comprises those descriptive words that find a place only in poetry, and which are nothing else but expressions of the refined perceptions of the most gifted and sensitive minds; and these very perceptions, unheeded by the generality of men, are, through the medium of the terms employed to convey them, brought within the range of all—are forced upon the notice of all. It is as when two persons, very unequally gifted as to their powers of observation, are travelling together; for the more observant of the two is every moment jogging the

elbow of his obtuse companion, and directing his eye, on the right and the left, to many forms of beauty which, by himself, he would have disregarded.

And thus again, there is another set of descriptive terms, expressing those partial, and yet very nice perceptions which result from the avocations and mechanical employments of different classes of men. These technical words (and the amount of them is very great, and their significance very remarkable) although they may not ordinarily be available in writing or discourse, are worthy of attention when considered as records, or notations, of the sensible qualities of things. We might take, for an example, that description of the sea and sky in a storm, which would be given by a landsman, of ordinary sensibility, and ordinary acquaintance with language; and which would well enough convey a general idea of the scene, in its broader features. But next, let us ask the poet, whose eye has a peculiar regard to the sublime and beautiful, and whose vocabulary contains a far more extensive assortment of terms, to take up the same theme; and we shall find that he not merely associates many fine sentiments with the natural objects before him, but that he has observed and noted many circumstances of the scene that had altogether escaped the vulgar eye:—in fact he has seen, what the other saw not. Yet this is not enough; for we must next call in the painter—

the marine painter, and if he possess a tolerable command of language—the technical language of his art, we shall immediately feel that he too has noted a hundred nice shades and aspects of the scene, which not even the poet had discerned. Yet every such technical descriptive phrase notes a real circumstance of a stormy ocean and sky; and each is a circumstance which, after it has once been pointed out to us, we shall ourselves be able, another time, to catch, and which we should regret not to have had the power of observing.

But this is not all; for if we go astern, and enter into talk with the old mariner who holds the helm, and get him freely to employ his slang terms in describing a gale of wind, we shall again be met, not merely by a new set of words, but by a new class of observations, so peculiar as not to have been regarded either by the poet, or the painter. One step more will lead us as far as we need go in this illustration. Let us then turn to the naturalist, or the man of science, who having acquired those habits of observation that are requisite in pursuing the exact methods of modern science, sees and notes, in the agitated sea and atmosphere, many evanescent indications of the meteorological, the chemical, and the electric changes that are going on, and which had wholly escaped every eye but his own: and these more recondite phenomena he consigns to a technical phrascology, peculiar to science.

And now, if we take the entire compass of phrases employed by—the common observer—the poet—the marine painter—the old sailor, and the man of science, and expunge the few which may be strictly synonymous, or undistinguishable in sense; the copious collection will then constitute a vocabulary corresponding with all the appearances, that are cognizable by the human eye, during a sea storm. The set of phrases employed by the first observer embraces only the most obtrusive features of the scene; those introduced by the second, have the effect of extending and refining our conceptions on all sides; and thus in succession, a third, a fourth, and a fifth pair of eyes, is lent to us, and by the aid of each, and through the intervention of language, we are made mentally the spectators of the scene, five times over, and until nothing scarcely remains unnoted or unthought of.

Now it is manifest that any one, by the simple and easy means of collecting, and making himself thoroughly acquainted with the meaning of the entire body of descriptive terms, as severally employed by different classes of observers, not only enlarges his knowledge of language (a secondary, yet important object) but brings himself into a point of view whence every nice variety of the external world may be distinctly noted, or vividly conceived of. To learn the meaning of all descriptive terms, whether common, technical, poetic, or scientific, is to furnish

the mind with a museum of specimens, containing whatever the most practised eyes have descried on the face of the material universe.

Yet this is but a portion of the benefit accruing from an extended acquaintance with descriptive vocabularies; for, as any one knows, words are at once our guides and our goads in seeing, hearing, tasting, smelling, feeling, with discrimination. Words are the stimulants of perception, and the indicators of the less obtrusive class of sensible facts. There are many thousand appearances in nature—there are innumerable varieties of figure, motion, colour, texture, which would never arrest the eye, and of which we should take no sort of cognizance, if we had not first come to the knowledge of the word which notes the particular phenomenon, and thence been led to look for its archetype in nature.

The hearing of a new descriptive term, with its meaning, is like the—"see there," addressed by the quick-sighted and well-informed to the dull, when the two are taking their turn through a museum. It is thus that the reading of poetry opens the eyes to a new world of phenomena, obvious indeed, but not actually observed until we receive this sort of aid. An appropriate instance in illustration of my meaning, may be found in the set of phrases employed by medical practitioners for characterizing the variations of the Pulse: for this example shows how very much the exactness of our perceptions depends

upon the mental aid we receive from the use of distinctive terms. An unprofessional finger, how fine soever may be its sense of touch, does not usually discriminate more than four or five varieties of beat, at the wrist; and we are content to say that the pulse is—quick or slow—hard or soft—strong or weak. But the varieties noted by the physician, and retained in his recollection by the use of distinctive epithets, amount to as many as two and twenty. As for instance, the pulse is said to be either—frequent, slow, intermittent, equal, regular, or of varying force: or it is—full, long, labouring, bounding, feeble: or it is—hard, sharp, strong: or it is—wiry, weak, soft, yielding: or it is—quick, or tardy: or it is—large, or small. Now by the mere aid of this set of phrases, fixed in the memory, an unprofessional hand might be trained, with a little practice, to feel and to distinguish all these varieties. Descriptive words, then, and especially technical terms, might justly be called the *antennæ* of perception: it is by these that we feel our way toward nicer, and still more nice sensations.

Or let any one give a few days' attention to a botanical glossary, storing his memory, pretty well, with those phrases which have been constructed for the purpose of noting what common eyes do not discriminate, in the forms and colours of the vegetable world. The mere possession of these words enables him to see what, without them, he would never have noticed. We now

put out of view the regularly conducted and scientific study of botany, and borrow an illustration from it, with the single intention of showing how the mere acquirement of descriptive phrases, understood in their etymology, and their actual or technical application, OPENS THE EYES, and leads the way to an extended and precise observation of nature. These same terms then, so employed to fix the attention upon particular phenomena, thenceforward discharge a higher function in regard to the conceptive faculty, serving to bring before the mind—not vague impressions merely of the more obtrusive features of nature; but all the varied richness of her garb, and with the utmost exactness. For example.—

We will suppose the case of a person not as yet systematically conversant with botany, but who makes himself acquainted with such phrases as the following, employed to express the varieties of vegetable surface. And it is presumed that he possesses just so much acquaintance with latin as is requisite for understanding such of these terms as are derived from that language.

Vegetable surfaces then are said to be—

RUGOSE, as the leaves of sage.

NETTED (reticulated) or covered with intersecting and raised lines, as the seeds of geranium.

HALF-NETTED; when, in several layers, the outer one only is reticulated.

PITTED; having numerous small shallow depressions.

LACUNOSE; having numerous, large and deep depressions, or excavations.

HONEY-COMBED; excavated in the manner of a honey-comb, as the receptacle of the poppy-seeds.

AREOLATE; divided into irregular angular spaces.

SCARRED; marked by the scars left by what has faded and fallen off.

RINGED; surrounded by elevated or depressed bands.

STRIATED; marked by longitudinal lines.

FURROWED; marked by longitudinal channels.

ACICULATED; marked with very fine irregular streaks.

DOTTED; covered with minute impressions, as if made by the point of a pin.

Or, to take those characteristics of the surface which relate to appendages, thereto attached. Vegetable surfaces are—

UNARMED; destitute of spines or prickles.

SPINY; furnished with spines.

PRICKLY; furnished with prickles.

BRISTLY; covered with rigid hairs, or straight prickles.

MURICATED; covered with hard short excrescences.

SPICULATE; having fine, fleshy, erect points.

ROUGH; covered with rigid short points.

TUBERCLED; covered as with warts.

PIMPLED; with smaller tubercles.

HAIRY; covered with weak thin hairs.

DOWNY; with dense short soft hairs.

HOARY; hairy, and so dense as to whiten the surface.

SHAGGY; having long weak hairs.

TOMENTOSE; covered with dense rigid hairs.

VELVETY; the same, more dense.

WOOLLY; covered with long, dense, curled, and matted hairs.

FLOCCOSE; having tufts of dense hair.

BEARDED; with tufts of long hairs, growing on different parts of the surface.

SILKY; covered with fine, close pressed, hairs.

COBWEBBED; covered with loose, white, thin, entangled hairs.

CILIATED; with hairs like the eye-lashes, at the margin of a leaf.

FRINGED; the margin set with thread-like processes, thicker than hairs.

FEATHERY; having long hairs, which are themselves hairy.*

Or we might confine ourselves to the last fourteen terms, which express the varied appearances of hairy vegetable surfaces. Now without the aid of this collocation and comparison of phrases, an eye, only in an ordinary degree observant, would perhaps never have noticed more than three or four of these varieties; and that only in a vague manner, and so as that the distinctive terms might have been used interchangeably, and improperly; or as if equivalent one to the other. But when once the fourteen words have been consigned to the memory, in connexion, and after some specimens of each kind have been examined, then, in every ramble by the hedge-side, fourteen distinguishable forms, instead of three or four, will be looked for; and furthermore, by the aid of these distinctive terms, the mind exercises a command over the images of the various forms so distinguished. Deprived of the assistance of language, very few minds, if any, could retain and recall, with precision, a large assortment of forms, shades, tints, kinds of

* See Lindley's Introduction to Botany.

movement, and modes of action. But with this assistance, the all but innumerable phenomena of the material universe, at rest and in motion, as they come under the cognizance of the several senses, singly or in conjunction, are not only treasured up in the mind, but are held at beck and call, so as to be available in whatever way they may promote the operations of the higher faculties.

The acquisition of the entire compass, or UNIVERSAL VOCABULARY of descriptive words, in our own language, I therefore consider as the chief preliminary work of intellectual education. This labour thoroughly achieved, the mind is placed in a position (according to the rate of its original powers) whence it may advance, with ease and success, in any direction it may choose. Nor is the labour implied in making such an acquisition by any means severe or repulsive; indeed it may be so conducted as to demand little conscious effort.

It is by the means of classification that we must abbreviate our toils in this department of study; and in fact much may be effected by this simple device. If nothing more were aimed at than to give the learner a command of the language of elegant conversation, and of books, we might leave out of view for the present, the whole mass of technical and scientific terms; and might rely upon general mental culture for conveying so much knowledge of words as is requi-

site for taking a part with advantage in society, or for relishing literature. But we have in view something beyond this—namely, the culture of the Conceptive faculty; and for securing this further end, it is necessary to include every species of descriptive language, whether technical or scientific; nor should we stop until the mind has been put in communication, by the means of words—ordinary and extraordinary, with every minute characteristic of the material world.

A classification of terms, fulfilling this intention, must therefore be somewhat complex; that is to say, in each division of descriptive words, there must be separately adduced,—all terms that are in colloquial use;—the terms of the poetic style; —words belonging to technical, and,—to scientific vocabularies. But to present to the reader even the heads of any such classification would trespass too far upon the limits of this volume; and instead of occupying space with an abstract of what could be of little utility, unless exhibited in its details, I will offer an example or two of the method in which the learner may be exercised, in the useful practice of assembling, and of sorting, descriptive words and phrases, for himself. These exercises, easily devised by the teacher, are of two kinds, the first of which may be called the Concrete method, and the second the Abstract.

By the concrete method, I mean, the adducing epithets, in as great number and variety as pos-

sible, which are attributable to any given subject: such as—the ocean—a river—a sandy desert—an alpine ridge; or, the forms of animals—the flight of birds—the colours of flowers: or, as exemplified below, the forms and colours of trees, collectively and singly; excluding those terms that are strictly botanical and technical: as thus:—

A forest is said to be—dense, dark, deep, entangled, pathless, gloomy, rich, magnificent, primeval.

Trees are—lofty, tall, low, bushy, ample, stately, umbrageous, wide-spreading, vigorous, decaying, shattered, leafless, scathed.

Foliage is—verdant, sombre, variegated, dense, fleaky, tufted, scaly, light, heavy, motionless, dancing, trembling.

The branches and roots are—gnarled, knotted, tortuous, slim, elastic, stooping, erect, fan-like, prone, supine, interlaced, aspiring.

The trunk is—massive, slender, twisted, helix-like, rugged, riven, hollow, ivy-clad, moss-covered, slanting, erect, fallen.

The bark is—rough, smooth, chapped, rigid, soft, interlaced, rugose, silvery, black, brown, grey, red, ashy.

The leaf is—thick, thin, polished, rough, indented, even, scolloped, triform, hairy, downy, trembling, green, yellow, red, brown, dark, light, bright, dull.

To these might easily be added as many more; and if the learner be furnished with an instance or two, so as to set him a-going, the exercise, agreeable in itself, will tend at once to enlarge his acquaintance with language—to give him a ready command of it; and, which is what we

here principally intend, to impart richness, precision, and vivacity to the conceptive faculty.

Or, to take another example—

The sky is spoken of as—serene, stormy, clear, overcast, misty, hazy, foggy, gloomy, lowering, bright, resplendent, brilliant, deep, dull, brazen, ruffled, red, grey, azure, vaulted, boundless, bounded.

At night it is—blackened, sombre, dim, sparkling, spangled, starry, magnificent.

Clouds are—thick, thin, heavy, light, dark, tender, fleecy, streaky, dappled, fleaky, massive, dense, mural, stormy, rushing, flying, flitting, motionless, broken, scattered, condensed, distinct, defined, commingled, confused, heaped, piled, towering, jagged, rounded, in tiers or strata, black, leaden, blue, red, pink, orange, fiery, glowing, cold, purpled, golden, silvery, fringed, feathery, buoyant, swollen, swelling, billowy, bulging, stooping, loaded, mantling, rainy, snowy, gathering, clearing, electric.

To these, amounting to nearly a hundred terms, descriptive of ordinary overhead appearances, the poet would add many others, of an allusive or figurative kind; such as—gay, glad, melancholy, cheerful, ominous, portentous; and the painter not a few of a peculiar sort, invented, partly, to fix in his recollection certain rare and peculiar aspects of the heavens; and partly (and perhaps chiefly) to indicate those characteristics of these same appearances, that demand attention when consigned to the canvass, whether skilfully or unskilfully; such are the terms—woolly, muddy, dirty, chalky, muzzy, harsh, warm, cold, clean, raw, heavy.

It is an exercise of excellent tendency to put down as great a number of epithets, as we can think of, applicable to some one subject, such as the foregoing; and then, cutting up the paper, and shuffling the pieces, to require the learner to arrange them in line; and in an order indicating the simplicity, or the complexity, the proximity, or the remoteness of each term, in relation to the natural order of our perceptions, and of the impressions thence resulting: as for instance:—a rock, or a mass of rocks, considered as to its *size*, is—

1st. Large, tall, wide, deep.
2d. Lofty, vast, huge, massive.
3d. Stupendous, grand, sublime, awful.

Or, considered as to its *form* and position, it is—

1st. Square, pyramidal, rounded, perpendicular, arched, obtuse, riven, cleft, jagged.
2d. Precipitous, steep, rugged, naked, impending, inaccessible, cloud-capped.
3d. Frightful, melancholy, threatening, grim, stern, dread.

In the above examples, the words in the first line, relate to simple qualities, cognizable immediately by the senses of sight and touch. Those in the second, express notions resulting from some tacit comparison, or relation, conjoined with a slight indication of the feeling with which such objects are contemplated. Those in the third are tropical, and imply some sort of prosopopœia; or an attributing of the qualities of

mind to natural objects. Several important intellectual habits must have been acquired by a boy who could take a handful of such slips, and sort them correctly, on the principle here mentioned.

Descriptive terms, collected in parcels as above, are concretes; that is to say, they are taken as the adjuncts of some one subject. But the same class of words are susceptible of assortment, or classification, in the abstract, or taken as related to the mode in which the qualities they signify are entertained by the human mind. A comprehensive scheme for the classification of this portion of language would cover a great space in a volume like this; nor can I attempt more than to offer a few samples of the way in which easy exercises may be prepared for learners, and given to them rather as pastimes than as lessons.

First then, let it be required to produce the principal terms that are employed to express those qualities of the material world which are perceived by one of the senses, unaided by the others, and apart from any inferences derived from other sources; and apart also from any notions of relation, or comparison; as for instance—

The simple sensations of SMELL, are indicated by naming the substance whence they proceed; as, the smell of musk, lavender, the rose, the violet, brimstone, burning feathers, &c.

The simple sensations of TASTE, have terms in the abstract for the principal classes, such as—sweet, bitter, sour,

acrid; and concrete terms for the varieties, such as—flavour of an orange, apple, grape, of port wine, champagne, of beef, mutton, veal.

The simple sensations of the MUSCULAR POWER have appropriated to them such words as—hard, soft, heavy, light.

The simple sensations of the TOUCH (seated in the cuticle) are indicated by the words—hot, cold, warm, rough, smooth, soft, sharp, blunt, tingling, tickling, itching, smarting.

The simple sensations of HEARING, are noted by the words—loud, low, shrill, deep, sharp: and still more accurately by the system of musical notation. Single variations of tone are indicated by employing individual names, as—the voice of John, the voice of Mary, &c., each of which is absolutely peculiar—an elementary tone, in recollecting which we are seldom mistaken.

The simple sensations of SIGHT, are peculiarly definite, and the terms appropriated to them are never confounded: such are the words—bright, dark, white, yellow, orange, red, blue, purple; and all their intermixtures, until we reach the nicest distinctions, and are obliged to have recourse to concretes, as in the phrases—peach-blossom, rosy, flesh-coloured, vermilion, ash-coloured, jet, ebony, &c.

A sample of terms, of this elementary order, having been produced by the learner, he should proceed to adduce, under an analogous arrangement, a second set, comprising those terms that indicate qualities known to us by an unconscious comparison of the sensations of two or more of the senses; or by comparisons of different sensations of the same sense; as thus, and to invert our order.

Objects perceived by the visual organ alone, but yet unconsciously compared with others, present or recollected,

are said to be—dim, distinct, vivid, faint, glowing, faded; or if judged of by the convergence of the two orbits (touch apart) they are discerned to be near, or remote.

Objects perceived and thought of by the means of the combined sensations of sight and touch, or of muscular movement, are—large, small, wide, narrow, high, low, spherical, hollow, convex, sharp, blunt, pyramidal, cubical, jagged, even, abrupt, slender, bulky.

Bodies, the qualities of which are perceived by the sense of touch, and of muscular action mainly; but known still more accurately by the concurrence of the perceptions of sight (and this class is very numerous) are said to be—solid, fluid, (or liquid,) gaseous, glutinous, sticky, elastic, pliable, tough, rigid, brittle, dense, porous; or the texture of bodies is considered as—fibrous, crystallized, spongy, woolly, compact, hairy, downy, reticulated, vascular, granulated.

Bodies, the qualities of which are judged of by an intimately combined comparison of the sensations of touch, muscular power, sight, smell, and perhaps taste, are said to be—oily, greasy, resinous, mealy, soapy.

Bodies, the qualities of which affect, in an undistinguishable manner, and simultaneously, the gustatory and olfactory organs, together with the sense of touch, and sometimes of muscular power in the tongue, are called—acrid, crude, pungent, astringent, rough. Or, if the smell chiefly, and the gustatory organs indirectly and obscurely are affected—aromatic, putrescent, ammoniacal.

The sensations of the auditory organ are rarely combined with those of the other senses; and only in the way of imperfect coalescence: such are certain vibrations of highly elastic substances, affecting simultaneously, though hardly conjointly, the ear and the sense of touch. But sounds, and musical sounds especially, generate highly complex sensations, as related one to the other, successively, as in melody, or simultaneously, as in harmony.

A second series of exercises may be furnished

by producing those terms (belonging to each of the senses) that express some relation of the qualities of bodies to natural uses, end, or artificial purposes; such are the words—ductile, malleable, soluble, arid, humid, tenacious, penetrating, ponderable, impalpable, opaque, transparent, refractive, reflecting, radiating, corrosive, stimulating, absorbent, dispersive, sedative.

A third series may consist of those terms, many of them scientific or technical, which express the elementary characteristics of bodies, or their generic or specific adjuncts; such as—silicious, argillaceous, metallic, vitreous, ligneous, bituminous, saline, gelatinous; or—granivorous, carnivorous, gregarious, predacious, viviparous, oviparous, biped, quadruped, reptile.

A fourth series, embracing a wide variety of terms, would include those designations of the sensible qualities of bodies which indicate, or connote, the feelings, pleasurable or painful, excited in us by them: such as

First, the more simple and organic, namely—tepid, hot, scalding, cold, refreshing, burning, irritating, glaring, dazzling, stunning, sweet, soothing, thrilling, melodious: or, secondly, the more complicate, and such as involve associations with the intellectual and moral faculties; as the words—beautiful, sublime, pleasing, gentle, grand, magnificent, tremendous, terrible, awful, astounding, exhilarating, melancholy, monotonous, invigorating, cheerful, gloomy: or—complicated, complex, simple, abstruse, recondite, obscure, evanescent, refined, subtile.

Under heads such as these and which may

be varied in many ways, at the pleasure of the teacher, and for the better exercise of the learner, it will be easy to include the entire vocabulary of concrete terms, belonging to the English language; and those who have not made the experiment will be surprised, when they do so, to find on the one hand, the readiness and facility that may soon be acquired in going through with them; and on the other, the productive consequence of such methods: for not only do they confer upon the mind a command of language, and not only do they generate a habit of nice discrimination, as to the sense of words, and their real dependence; but they put it (and this is our immediate purpose) into ready communication with the material universe, in all its innumerable aspects; and store the imagination with vivid conceptions of whatever is cognizable to the senses. It belongs to another department of our educational system to insist upon the fact, which I have already alluded to, and will here again offer to the reader's consideration, that a comprehensive, well digested, and practised acquaintance with the concrete portion of any one language, amazingly facilitates the acquirement of another, or of several in conjunction. The well assorted descriptive terms of our own language, vividly associated with the qualities they indicate, become, as one might say, so many points of concretion—of crystallization, around which the equivalent terms of any other lan-

guage assemble, almost with the celerity and certainty of a chemical process: for while the abstract terms of a language are open to ambiguities, preventing the fixed convertibility of one language into another, the concrete, expressive as they are of the impressions made upon the human mind, in all times and countries, by the unchanging qualities of the material world, are far more constant, and better defined. And it is a circumstance deserving of regard, in this connexion, that the lower we descend toward the nice shades of difference between one quality and another, the more fixed are the terms, in all languages, that are employed to mark them.

But I must resist the inclination to pursue this, and several other related subjects; and having hastily indicated the course that may be pursued, or rather the objects that should be kept in view, in training the Conceptive faculty, shall conclude this chapter by naming one or two useful practices, having the same intention.

Drawing and modelling, in all their modes, should, as I think, be considered, not so much as an elegant accomplishment, and as one of the most agreeable of relaxations from more arduous employments; but as the best possible supplementary means for bringing the eye and the mind into intimate communion with nature. Drawing, on the one side, and the study of language on the other, in some such mode as has just been

indicated, bear together upon the Conceptive faculty, and with a stress that imparts to it a condensed force, and reactive spring.

But then, for securing these objects, we should resolve to have done with "drawing lessons," almost entirely. A child, in a winter's evening, may indeed be indulged with the lithographic sketch-book, to copy what he pleases; but all regular training, in the arts, ought to consist of drawing from real objects, at home and abroad. Apart from this rational method, the mind halts in art, and does not step forward to converse with nature. And when, by this means, a tolerable readiness has been acquired in the use of pencil and crayons, it is a good practice to require sketches of objects, or of scenes, that have previously engaged the attention. This operation, held in check by the constant habit of drawing from the present object, is a direct appeal to the conceptive power, and affords the most conclusive evidence of its exactness, and of its vivacity, in any instance. In this way the simplest and the most definite subjects will furnish the most satisfactory exercises. Thus, for example, I would not ask merely for—*a* landscape—*a* cottage, and *a* mill, or *a* rocky glen at pleasure; but for the gable end of John Brown's ivy-covered cottage, visited a month ago; or for the ruined south front of the tower beneath which we find a shade twice or thrice during the summer. Or, in July or August, let it be required

(patterns out of the question) to produce an exact outline of the snowdrop or the crocus: or the converse task, of delineating the flowers of July in January.

On the same obvious principle, the various subjects of natural history, and those which are less familiar, immediately after they have been attentively examined, may be sketched from recollection. Drawing, disregarded almost as an elegant accomplishment, may, with the highest advantage, be employed as an auxiliary to the sort of elementary mental culture which has been spoken of in this, and the preceding chapter. The process consists of these three parts;—to see and examine whatever may be brought before the eye—to connect words, in all their compass, with what has been seen—and, to delineate or depict whatever has been seen, and whatever, by the aid of verbal description, may be correctly conceived of. By the means of these commingled operations, not only does the entire face of nature become familiarly known, but it is steadfastly held in the Conceptive faculty, and is producible, instantaneously, and correctly.

If in any instance a child appears to have no eye, or hand, or executive and imitative faculty, I would by no means vex him by pertinacious endeavours to form a habit in opposition to the intentions of nature. Drawing is an excellent means of training—for those to whom it is

suited; and I think there are but few who need to be excluded from the benefits it confers.

The exercises in collecting descriptive words, just above specified, are adapted to be *written*, as they imply deliberate recollection, and some revision; but the mental operation is of a different sort when the task enjoined is an extemporaneous utterance of thought. For in this case the pure law of association comes into operation, and prevails over any notions of fitness, or abstract relation. This method also should enter into our plans; and it may be put in practice (as related to the training of the conceptive faculty) by the following, or similar easy means. Perhaps no book better than Robinson Crusoe, furnishes the materials we want for this purpose. A boy, whom we suppose already to have become pretty familiar with the story, may be directed to some one of the more stirring passages, of which, in all its details, he is to make himself master. After an interval of some days, he is required to ascend the rostrum, and thence, without bombast or exaggeration, to recount the incidents, giving them all the vividness he can, and yet avoiding the actual phrases of De Foe. If he be master of french enough, or of latin, to render the story into either of those languages, several benefits will be secured together.

The reason for assuming De Foe's romance, in such an instance, is, that the simplicity, familiarity, naïveté, and vividness of the descrip-

tion, bring the scenery, in the most lively manner, before the mind, and enable it to tread the ground of the story, as if we were actually narrating our personal history. In attempting a similar exercise, taking some signal transactions of real history as the subject, other faculties would be called into exercise, and in a manner not unlikely to repress the conceptive.

We might however make the attempt with certain striking events; such for instance as belong to the history of the Black Prince, or of Henry V; or perhaps, still better, the principal scenes of the Crusades. These last, if the materials are afforded in sufficient abundance, may answer the purposes intended in the best manner. The young speaker, in such instances, should be taught to confine himself to what would, on the real field of action, have struck the eye and ear. At present, we want neither reflections, nor reasoning; any more than declamation.

It will be manifest that the exercises adverted to in this and the preceding chapters, are adapted, some to the earliest, and some to the latest years embraced by a course of Home education. In some, the teacher is the principal agent, and aims at little more than supplying an expanding faculty with objects adapted to it; in others it is the learner who is to take the lead, directed only, and aided by the teacher. The process of training, therefore, which we intend, is one that will run on from the fifth, to the fifteenth year, being

kept in view, as occasion offers, and made to harmonize with the culture simultaneously bestowed upon the other faculties. It takes the first place in our plan of education, simply because it is the earliest to show itself; and because nature has assigned to it the principal influence during the first eight or ten years of life.

CHAPTER XI.

TRAINING OF THE SENSE OF RESEMBLANCE AND RELATION, AND OF THE PERCEPTION OF ANALOGY.

AS early developed almost as the Conceptive faculty, the sense of Resemblance agrees with it in the circumstance that it comes into play independently of any conscious effort of the mind: it is an INTUITION; and the culture of both may be carried very far without making any demand upon the power of continuous attention, and therefore, without expending that force which we wish to keep in reserve. The same nearly may be affirmed concerning the perception of analogy.

Nevertheless, while a field is open to us in this direction, where much may be done with little labour, the ultimate results are important and manifold. The culture of these spontaneous faculties may be compared to the farming of pasture land, where the produce is large in proportion to the labour annually bestowed; but

the culture of the abstractive and reasoning faculties is like the farming of arable land ; where the crop, how valuable soever it may be, is hardly obtained, by dint of toil—acre by acre, rood by rood, foot by foot.

The due culture of the two, that is to say of the Conceptive faculty, and of the perception of Resemblance and Analogy, constitutes the preparation for whatever else, either of knowledge, or of power, a complete education is intended to confer. The operations of the first are attended with and characterized by tranquil emotions of pleasure ; but those of the latter make themselves known by a vivid flash of agreeable feeling. The former leaves the mind content with its own evolutions ; the latter rouses it to action, and impels it either to inquiry, or to imitation : in giving it excitement and direction we are therefore making an approach, in an easy and natural manner, toward the more arduous paths of the educational course. The transition is imperceptible and inviting, from the half involuntary discernment of resemblance, to the somewhat more active perception of analogy ; and thence it is but a step to efforts of abstraction ; and thence again onward to the operations of the reasoning power.

The sense of Resemblance runs before the power of discriminating or of designating differences ; and hence it happens that the infant and the savage, apply the names of individuals to

species, and the names of species to genera. Thus the infant of two years old calls a dog, puss (if puss has been the more familiar acquaintance of the two) and mamma's muff puss also; and it does so with a sprightly emotion, as if of self-complacency, in finding that it has recognised the sameness, notwithstanding the difference, of the two objects: and the more there is of dissimilarity, so as that the points of identity still prevail, the keener is the pleasure that is felt in the act of recognition:—it is as when one, entering the house from a journey, muffled up in coats, is found, after he doffs his envelope, to be a dear, but unexpected friend.

The occasions should be particularly noted when an intelligent child begins to use, and to *misuse* epithets, expressive of the visible characters of things; for in such cases we may be sure that the mind is spontaneously evolving a new faculty, or a new mode of action: that is to say, it is advancing from that exercise of the sense of resemblance which relates to species of things, toward that which embraces abstract qualities. A child, who at an early period makes many blunders of this sort, is one who, in the end, is likely to possess a ready and extensive command of language. A very little boy, looking from a height upon an opposite wooded hill side, about a mile distant, exclaimed—How beautiful are the scales of the wood! He was not reproved for misusing the word *scales*, or for extending it

from the glossy back of a Roach or Dace, to the soft, receding, and rounded summits of a dense wood, seen in gentle perspective, and in a misty summer's morning, lapping one over the other. An inland child, of three years, at first sight of the sea in a storm, calls it, very dusty, and affirms that the sky, after sun-set, is red hot; or when freckled with clouds, says that it is strewed with feathers. Every child finds a garden, with its firs and shrubs, upon a frosty window pane; and in the heart of the fire he descries castles, grim faces, lions and tigers.

The class of terms, and the tropical diction which the poet courts, and sometimes goes far in quest of, present themselves spontaneously to an observant child: and for this simple reason, that his perception of resemblances and of analogies is always far outrunning his knowledge of language: he is therefore driven, by the mere paucity of his vocabulary, to misapply, or to extend terms; and he often does so in that very way which involves the excellence aimed at by the poet. When at length the stores of the language become so familiarly known to us that the precisely appropriate word occurs to our recollection, for designating every object, and every nice variety of each, while we gain in the power of expression, we forfeit that pleasurable perplexity which arises when a resemblance is discerned which we can express only by borrowing a phrase from some remote quarter. It is in

search of this very pleasure, that the poet steps back to the recollections of childhood.

After having called a muff *puss*, at two years old, and the sea *dusty*, at three, and a wood *scaly*, at five, thus running on regularly toward the abstract, a child at seven or eight comes to express the most intimate and recondite emotions of his own mind by the aid of analogies, still more remote, but yet not less philosophically true than poetical in mode. A little boy, after hearing, with sparkling and brimful eyes, some descriptive passage from Paradise Lost, burst out with the exclamation, Oh! it is like tasting a hundred grapes! The next step, with the same mind, and as developed naturally, and without any leading on by a father's hand, has been the catching some really abstruse analogies, such as those involved in applying a principle of one science to the facts of another, for instance, the laws of motion in solids, to the action of the atmosphere; or, more familiarly, in applying a parable in the Gospels to an instance of conduct substantially, but not apparently analogous.

The sense of Resemblance, involving the ideas of contrast and difference (if we are speaking only of childhood) has respect to the visible and tangible forms of things, natural or artificial. The sense of Relation is chiefly concerned with the circumstances of sequence or order, of proportion, and of dependence. The perception of

Analogy relates often to what is more abstruse, involving identity of principle or mode of action, or of construction, as well as sameness in uses, or final causes. While therefore the first-named of these intuitions of the mind attaches to the time of its earliest dawn, the second hardly comes into operation until infancy has gone by; and the third, except with children unusually intelligent, ought not to be looked for until near the commencement of the later period of early life, or about the eleventh year. Nevertheless the three mental states run one into another so imperceptibly, and they lead on, one from another, so naturally, that it would scarcely be practicable to treat of them otherwise than conjointly. The methods of exercise I have to suggest are proper, some to the fifth year, some to the fifteenth; and I here again, and once for all, remind the reader of this circumstance.

I shall touch upon the several points just named, as briefly as possible, consistently with the conveyance of my meaning in a manner that may be practically available.

Let us speak then of the sense of Resemblance, and of its implied correlatives—the perception of contrast and dissimilarity. The Conceptive faculty is concerned, as we have said, with the correspondence between ideas, and their archetypes in nature; but the sense of resemblance has to do with external objects only; and as they happen to be brought into comparison: nor even

among such objects does it properly relate to things identical, or nearly so; but rather to such as are distinguishable, on some accounts, while, in other respects, they are similar. Thus this sense is not quickened by the mere presence of two or more objects barely distinguishable, or absolutely alike; but it waits to be roused by the conjoined influence of sameness and difference. A child, standing at a stile, in a narrow lane, watches the passing of a flock of lambs, with a vacant stare; but if these lambs, with their curling fleeces, are succeeded by a flock of newly-shorn sheep, the sameness and the difference, and the former obtruded on the eye by the latter, rouse the attention, and a question briskly put, gives evidence of the awakening of curiosity: then if these should be followed by a flock of goats, a new vivacity is added to the same feeling, and another inquiry is made.

The reader will not, I hope, think my instances too trivial, if I ask it to be supposed that a child has been amusing himself with marbles, all of a size, and nearly of the same colour: if then there be placed before him, first, a number of white ivory balls of the same size as the marbles, and then a set of ebony cubes or prisms, I think it will generally be found that the former, as brought into comparison with the marbles, excite more attention than the latter; inasmuch as the sameness of figure and size, combined with the difference of weight and tex-

ture, sets the mind at work more than is done by objects entirely dissimilar, in form, colour, and weight. But whatever might be the result of such an experiment, and which may be affected by accidents, the broad fact is certain that resemblance excites attention, and gives pleasure, directly in proportion to the contrasts with which it may be associated.

It is not therefore to the imitative arts that we are to look (as in relation to the conceptive faculty) for the aids we want in arousing the mind to the exercise of its sense of resemblance. Occasions must be looked for, and seized at the moments when they arise, for applying the sort of stimulus we need, with this view. A formal pursuit of our intention, as if it were to be separately regarded in a course of study, is out of the question. But when, for example, the teacher is engaged with any branch of natural history, instances in point will offer themselves at every turn. Thus if the stem of the lily be under examination, and the peculiarity of structure in consequence of which it rises like a column from the earth, and does not, like most other plants, gradually increase in bulk, be pointed out, the question may be put, supposing the learner to be in possession of the requisite information—Whether he recollects any classes of trees or plants of which this is the distinction; and then, if in fact any of the tropical endogenous plants, such as the palm, the bamboo, the cane,

occur to him, the mere recognition of the resemblance between things so remote and so unlike gives the mind an impulse, and leads it to look for new instances of the same kind.

The more of vivacity is derived from contrast, the more will resemblance arouse curiosity. The teacher, with this intention, may assemble his little group around him, challenging them to look at—an *elephant* not bigger than a pea; and then bringing under the microscope a common fly busy with a lump of sugar, may show the proboscis—like enough to that of the elephant, in form, and in the mode of using it, to make all acquiesce in the designation that has been given it. On the first occasion of visiting a menagerie, children recognise the cat in the tiger; and the dog, in the wolf; and such an opportunity is a proper one for directing their attention to those peculiarities of action and gait, as well as general form, which are points of alliance within classes and orders. Again, the microscope, applied to certain species of moss, and to some kinds of vegetable mould, affords an agreeable surprise when these are exhibited as little forests; and especially so if, by the aid of the solar or lucernal microscope, such objects are brought the more strikingly into comparison with trees and shrubs, as to size. Some other feelings are combined in that delight with which children will fix their gaze upon the aquatic plants and lichens that often enrich a little pool of translucent

water; or upon the sea-weed glens and grottoes, alcoves and fairy palaces, found in the hollows of a rocky coast, at the ebb of tide. During long hours is the fancy enchained by analogies of this sort.

If a box of geometric figures—cubes, cones, prisms, pyramids, be put into the hands of a child, with the technical names attached to them, he will exhibit a lively pleasure in replying to questions, such as shall lead him to recognise each of these forms in some familiar object; as the roof of a house—a prism; the church spire, or the extinguisher—a cone; a beer barrel—a frustrated spindle; a cricket ball—a sphere; an egg—a prolate; and a turnip—an oblate spheroid. A similar exercise is afforded in designating vegetable forms, as for instance—leaves, by comparison with common objects: thus leaves are—arrow-shaped, spear-shaped, sword-shaped, heart-shaped, fiddle-shaped, trowel-shaped, diamond-shaped, feather-shaped, awl-shaped, spoon-shaped, shield-shaped, ribbon-like, string-like, tooth-like. The finding a fit comparison is a good means of exercising ingenuity in this line. A pleasure, having the same origin, attends the use of those designations that are frequently applied to the bold features of the earth's surface; as—Table mountain, Saddle ridge, Sugar loaf, the Needles, the Seething pot; or the allusive terms so plentifully employed in descriptions of stalactite caverns, as—the giant's dining-room,

dressing-room, kitchen, chapel. The perception of such resemblances adds what is wanted in carrying forward the culture of the Conceptive faculty, until it works in with that of the Abstractive power.

Again, the sense of Resemblance embraces those qualities of things visible and tangible, which are designated by abstract terms; and here a wide field is open to us, on which to prepare the mind for higher and more difficult exercises. As we must return to this subject, in treating of the abstractive faculty, we now only adduce an instance or two in explanation of our meaning, as when, for example, TRANSPARENCY is specified in all the substances to which it attaches, whether natural or artificial; beginning with the one to which the term is most often applied colloquially, and going on to instances less likely to be thought of. As thus—what things are transparent? Glass, diamonds, crystal, horn, talc, oiled tissue paper, water, spirits, and the atmosphere: and we may bring to the same termination another question:—What things are heavy? Lead, stone, wood, water, and—air. In such instances, when the quality in question is recognised as belonging to something quite familiar, and yet not often thought of in that point of view, there is excited precisely the sort of agreeable surprise of which good use may be made in awakening the intellect. That the atmosphere is transparent a child readily grants; but he starts at first hear-

ing the invisible, impalpable air he breathes associated with lead, or with stones.

Or thus—What substances, which are solid when deprived of heat, do we usually find in a fluid state? Water; yes, and—quicksilver. A wooden hoop, thrown aloft, rebounds several feet from the earth: it is—elastic. But this distended bladder does so too; is bladder elastic? no; but that with which it is filled is so, namely—air: a hoop, and a steel spring, and—the atmosphere, are then alike in this respect, they are all—elastic. The atmosphere therefore is—heavy, like lead; transparent, like water; and elastic, like steel. Or again: some bodies are permanently one colour; gold is yellow, silver white, a rose-leaf red, an iris blue; but other bodies exhibit changing colours, when seen in different positions; and seem in themselves to be colourless: what are the instances?—mother of pearl, drops of rain, or dew, garden cobwebs, soap bubbles, films of oil upon water, and many kinds of crystals.

The sense of Relation is, in strictness, only the discernment of a sameness, under circumstances of difference; as when a part is seen to be a third, or a fourth, of the whole; the part is thought of as many times over as will make it equal to, or the same as, the whole. The relation of sequence constitutes the principal ground or material of that ulterior and important process of

education which bears upon Cause and Effect. And the relation of proportion also, is too intimately connected with mathematical principles, to be easily treated of in this stage of our course; at least the consideration of it would involve some real or apparent repetitions. But we may find an open field in eliciting the sense of ANALOGY; or that more refined discernment of resemblances which embraces general physical laws, identities of principle, or modes of action, the sameness of final causes, and those agreements, or points of harmony, that are discoverable between the material and the spiritual and moral worlds. A very large portion of that sort of incidental exercise of the faculties—that incessant intellectual communion, which should be the characteristic of home education, turns upon the diversified methods that may be employed in developing the sense of analogy. All courses of exertion are opened to the mind that is alive to this class of perceptions; for a keen perception of analogy implies every kind of mental power, in some degree.

Some instances adduced as they present themselves, may serve to illustrate a method of treatment which, in its nature, must be desultory, and dependent upon occasions accidentally presented. I do not know that it would be possible, even if it seemed desirable, to follow a prescribed plan, or a logical order, in carrying forward this species of culture.

No instance is more fit for giving exercise to the early developed sense of analogy, or better exemplifies the agreeable emotion which, by the conformation of our minds, attends this perception, than that furnished when we bring the labours, politics and passions of some of the insect tribes into comparison with the economy of human life. The insect edifices, the insect police, the insect social sentiments, furnish a lively and stimulating species of instructive entertainment; and the pleasure, and the excitement, in such instances, turn upon this propensity of the human mind to catch, and to please itself with analogies.

In pursuing this sort of intellectual diversion, the teacher's purpose is favoured by his allowing himself a good deal of license in applying the phrases of common life, and the technical terms of the mechanic arts, as well as all but the more sacred language of the moral and social economy, to the operations of the insect tribes. He will however observe the line which separates the regions of natural history, strictly considered, from the unfenced common of fable; for children must be left in no uncertainty as to the boundary between the domains of Linnæus, and those of Æsop.

If the reader wishes to satisfy himself as to the alleged fact, that the discernment of analogies generates very vivid emotions in the minds of children; and that therefore it may be

made much use of, as an engine of education, let him try the easy experiment of first describing the economy of the bee-hive, and of the ant-hill, in terms such as shall indicate the many points of analogy that exist between the wonders of instinct, and the operations of reason: let the mathematical perfection attained by the one class of operatives, be compared with the empirical and scientific performances of the other: let the impulses of the insect actors, and the regulations and dependencies of the microscopic commonwealth, be translated into the language of human life, of history and of political science. The most agreeable excitement will attend such a lecture. But then let a sudden transition be made to those subjects, in natural history, which involve no such analogical relations to human labours, or affairs: a very sensible lowering of the intellectual temperature will give evidence that a potent principle of the mind has ceased to be wrought upon. In thus turning from the natural history of the bee, to that of the moth or common fly; or from that of the ant to that of the beetle; or in following our account of the beaver, with an account of the otter; it will be manifest that it is not so much insulated facts, as facts related by some principle of agreement, that awaken the intellect.

The analogies of operation, above alluded to, do not fail to attract even the dullest minds; but an exercise more purely intellectual, and of a

more substantial quality, is afforded when the many points of analogy which connect animal and vegetable physiology, and again human and comparative anatomy, are adduced. On this ground the teacher finds inexhaustible materials, out of which to construct the very best kind of intellectual exercises; and let me here again press upon his notice the important distinction between the mere conveyance of the facts of natural history, and that employment of natural history, as an instrument of mental culture, which I am now recommending. While using these, or any other studies for this latter purpose, the former and more obvious one is fully secured; but it is certain that this, namely, the conveyance of mere facts, may be so attended to as scarcely at all to promote the other.

There may be books better adapted to the purpose now in view than Dr. Roget's Bridgewater Treatise; but I will suppose that the teacher avails himself of this admirable work as his text book, and following the author's track, without always adopting his language, which may not be readily understood by children, he explains the several functions of vegetable and animal life, comparing the various modes in which the same, or similar ends, are secured, either by the same, or by dissimilar, yet analogous means.

The obvious and wide unlikeness of a plant and an animal, serves the very purpose intended,

of enhancing the feelings of pleasure and surprise excited by discovering points of analogy between the two, in the economy of growth and reproduction. Thus the circulation of the nutritive fluids, and the system of the secretive processes, the respiratory mechanism, and the absorbent system, the vital irritability, and the fibrous contractility, as belonging to both these grand divisions in nature, not only stimulate curiosity, but lead on, in an insensible yet secure manner, toward the higher and more difficult efforts of abstraction. Now, at this point, we might compare two given modes of mental training, the one of which enjoins that, at a certain era of education, Logic, with its dry solemnities (not to say jargon) shall be taught; while the other method, not caring much whether the word logic has actually fallen on the ear, and assuredly not meddling with the

Barbara, celarent, darii, ferioque, prioris—

offers to the opening mind intelligible objects, drawn from the agreeable realities of nature, which lead it on unconsciously, and without labour, from its intuitive perceptions of relationship and analogy, to the most refined and abstruse generalizations. I am bold, and might be warm, in affirming, that this latter method, early commenced, and steadily pursued, is the one which promises to train reasoners who shall find their education actually available in real

life, and out of college; or to train philosophers, who, instead of dreaming with Aquinas, shall advance the useful sciences, with Bacon, Newton, and Playfair.

No better book of elementary logic could, in my opinion, be constructed, than one which should simply select, and judiciously arrange, those instances of analogy which connect the several families of organized beings; and which, commencing with the most obvious resemblances of form, should ascend to remote alliances of principle, involving the ultimate laws of life. So insensible are the steps that may be taken, that, if the process be extended through a course of two or three years, the learner may be led on from those perceptions which are involuntary, intuitive, and pleasurable, to the very highest points of abstruse speculation; scarcely knowing when he has made an effort to rise:—just as a traveller, in certain districts of central Asia, may pursue an easy road from the dead levels of the Caspian steppes, to the most elevated Tartarian Table lands overlooking a continent; and scarcely know that he has been holding an upward path.

Sameness and difference—differences among things very nearly related, and samenesses connecting things very remote, are the objects of the physical sciences: and it is these same points of contrast and of harmony that supply the best incitements to the opening intellectual powers.

When, to some considerable extent, the sentient and organized families have been brought forward, first, as to their external resemblances of form; next, as to their habits; and lastly, as to the laws of their internal structure, and vital functions, then comes the time for ascending to another stage, and for advancing towards those principles which involve IDENTITY of LAW, rather than analogy of principle. This more advanced species of mental culture is afforded by those of the physical sciences that are more or less dependent upon mathematical reasoning. It is therefore now assumed that a moderate proficiency in the mathematics has been made by the learner. Although strictly speaking, it is not analogy, but identity of principle, that connects the falling of a stone, or its tangential leap from a sling, with the motions of the planetary system, nevertheless, the two classes of facts being immensely remote from each other, as observed by the human eye, and the one being familiar, while the other is shrouded in a sort of mystery, the effect upon the young mind, made by adducing the one, in illustration of the other, is nearly the same as in any instance of a mere analogy; and these physical principles, whether applied to mechanics, or astronomy, may be made to subserve the same purpose, as means of education.

The applicate and the mixed sciences—mechanics, pneumatics, hydraulics, hydrostatics,

optics, acoustics, abound with instances, available for the same purpose; and as often as some familiar incident of domestic life can be connected, by means of a word or two of scientific explanation, with philosophical principles, the mind of the learner is carried through a similar process, advancing from what obtrudes itself on the senses, to that which calls the higher faculties into play. Such a circumstance has occurred at a tea-table, as that of the heater of the urn rushing up, and carrying the lid with it, like a broad brimmed hat, to the ceiling. What could we wish for better than such an accident (if no heads were broken by the descending mass) as an illustration of the principle of the steam engine? A fit question, when tranquillity was restored, after such an accident, would have been—What mechanical contrivance does this explosion put us in mind of? and the word the steam engine, uttered of course, by one of the elder children of the family, would stimulate the curiosity of those next in degree below them.

This kind of incidental exercise, no well informed teacher can need to have exemplified at length; and the occasions are innumerable in which it may be put in practice. After having, as was recommended in a preceding chapter, gone over the entire ground of the physical sciences in search of such facts as are proper for enriching the ideal faculty; I now suppose that the teacher returns upon his path, and gleans thence another

sort of material, that is to say, those allied or analogous facts, such as have been mentioned, which penetrate the mind a little deeper, and arouse it more to action. Conceptuality is passive, or chiefly so; the sense of Resemblance is also a passive perception, yet it leads on to the discernment of analogy, which is more an active sense, and tends to induce a still higher activity.

Chemistry, and its related sciences—meteorology, mineralogy, electricity, galvanism, magnetism, are all of them rich in instances that may be made subservient to our immediate purpose; and let it be considered how much the future progress of the learner, in rendering himself master of the purely philosophic principles of these sciences must be facilitated, when he has already gone over the ground, twice or thrice, and in that very order which adapts itself to the gradual expansion of the faculties.—That is to say, first, in search of visible and striking facts merely, and such as serve to stock the mind with bright images; secondly, in search of those resemblances and analogies which are intuitively recognised, and the recognition of which is attended with a lively emotion of pleasure; and lastly, in the arduous pursuit of abstract generalizations, and recondite laws. How often is this natural method reversed! the most difficult things, and those the least attractive, being first presented; and this merely because logical order demands that they should

be placed on the first pages of an elementary book; or perhaps because it is much easier to drive the machine of education on this road, than on the other.

In quest of the instances he wants, the teacher will sometimes advance from the most familiar facts, such as the blowing a soap bubble, to the principles it illustrates; and sometimes he will descend from the statement of principles, to the most familiar illustrations: as if, after having talked, with due gravity, of solution, decoction, evaporation, congelation, latent heat, and the radiation of heat; he holds up the cup of tea in his hand, as a combined exemplification of each of these processes.

Much agreeable excitement is obtained among a number of intelligent children when a cluster of analogies, brought from all quarters, can be concentrated upon a single, and a familiar object, or phenomenon: as for example—upon the blowing of a soap bubble. If such a family circle includes some who have made a fair proficiency in the mathematics, while others have only, as yet, laughed and chatted with Philosophy, such questions as the following may be put to the group:—the soap bubble having been blown from the end of a tube adapted to the purpose. With the bubble suspended, and the tube adroitly twirled, it is asked—What is now the figure of this bubble? it is a flattened sphere; called?—an oblate spheroid. What oblate sphe-

roid can you think of, which owes its flattened figure to the very same cause that has changed this bubble from a prolate to an oblate form?—the earth. And what is that cause?—the twirling it. Then, this earth of ours is an oblate spheroid; or we might call it a bubble blown in molten granite, and spinning on its axis while yet soft. But now the bubble is motionless, and the superfluous fluid, which had encircled its equatorial region, subsides, and forms a big drop, pendent at the southern pole. But do the two poles form arcs of the same sort? not precisely, for the upper arc is a more open ellipsis; the lower tends to a point: like?—a chain suspended, with a weight at the middle; but the upper arc is more like?—the extremity, or turn, of the orbit of a comet. Or suppose (which we cannot do in fact) we could, without altering its figure, invert the suspended bubble, keeping the drop balanced at the vertex: this would then resemble?—the pointed arch, seen in some bridges, and in which the pressure is made to bear upon the piers, just as the drop would bear upon the sides of the bubble.

But now I detach the bubble from the end of the tube with a jerk, and consign it to the winds; like?—a balloon; and like a balloon it ascends; steadied, however, by the pendent drop, which may represent the car. Why does it ascend?—the bubble is very thin, and very light. But so is the air through which it ascends. Yes, but the

air within the bubble is rather lighter than the external air. How so?—it comes from the lungs, and is therefore lighter: No; what we expire is? —carbonic acid gas, which is considerably heavier than common air: Why then does the bubble ascend like a balloon?—because air from the lungs is much rarefied by the heat of the body; and this more than compensates for the greater density of the gas, when it is at the same temperature. When a balloon passes through a very cold stratum of the atmosphere, it?— collapses. When the soap bubble rises into a colder current of air?—it bursts: inwards or outwards?—inwards: on coming from the shade into the beams of the sun it bursts?—outward: and scatters its drops on all sides. But see! on this side of the bubble there is a miniature picture of the garden, exquisitely painted, in all its many colours: it is a reflection from the filmy surface: but why is it in miniature? -because the surface is convex, like?—the mirror in the dining room: a magnified image must proceed from? a concave surface. But beside this coloured picture, the bubble exhibits, in the sun, all the tints of the rainbow, and these are changing every moment on its surface, like?—mother of pearl—like the single threads of a spider's web, like a film of oil upon a white plate, or upon the surface of water. The proficiency and age of the parties, in such a lecture, would determine whether the doctrines of refraction, and

polarization, should be explained ; or merely the facts noticed. But the same occasion would lead the teacher to speak of fluid tenacity, and of capillary and corpuscular attraction, as exemplified in this, and many analogous instances.

It is not necessary, at least during the earlier stages of education, to insist upon the difference between a general analogy, and a strict identity of principle : several of the instances already adduced may therefore be allowed to pass, not narrowly scrutinized, in this respect; and the same must be said on those very frequent, and very pertinent occasions, when the problems of geometry may be exhibited in their application to familiar operations. It is enough, in regard to the sort of intellectual training we have now in view, if, by the aid of that obscurity which is likely to attach to a child's notions, the identical principle be just so far mystified as that the pleasurable emotion shall be generated which attaches peculiarly to the perception of analogies.

How many advantages, of various kinds, attend the practice of demonstrating geometrical theorems afield, and with the chain and theodolite in hand! In such operations we combine, exhilarating exercises abroad, a definite intention, and an intellectual training. But to speak only of what belongs to my immediate purpose, it will be found that, after a problem has been worked —let us say, in its dry form and upon paper, an unexpected application of the truth which it

involves, to some real and practical purpose, and on a large scale, excites the sort of pleasurable surprise we are now in quest of. Let the simple rule of proportion, as applicable to right angled triangles, have been explained.—As the horizontal or base line is to the upright side, in the small triangle A, B, C, so is the horizontal to the perpendicular in the large, and similar triangle D, E, F. This has been the morning's lesson at home: and in our walk immediately afterwards, we come up to a signal post, or flag staff, surrounded by a fair level, on which we can trace, and measure accurately, the shadow it casts. Now what is the height of this flag-staff? How shall we measure it? Will any one climb it with a line in his hand? Instead of attempting this, we plant a walking-stick upright, in the turf; measure it, and its shadow; and also the shadow of the flag-staff, and in three minutes, and perhaps without the aid of pencil or slate, we have found the height required.

The measurement of inaccessible horizontal distances, by the same principle, affords another sort of diversion. But a little more nicety of handling, and of calculation too, is required for ascertaining the distance of remote objects by the parallax, or the known relation between the base and the altitude of an elongated isosceles triangle: this however may be effected; and when we are sure that the method has been thoroughly understoood, the moment must be

taken for showing its application to the measurement of the celestial distances. The teaching of geometry is one thing; the employment of geometrical theorems or problems, for quickening the sense of analogy, is another. And it is manifest that great use may be made of this science for such a purpose. No day will be barren of occasions on which to bring familiar facts and abstract principles into apposition, one with another, in some attractive manner.

That branch of intellectual training to which, in this volume, I am directing the reader's attention, and which has regard solely to the INTUITIVE faculties, is distinguished from the methods of culture hereafter to be specified in one particular, namely—That, whereas, when the ACTIVE powers come to be elicited, a well digested consecutive system must be adhered to; on the contrary, the very characteristic of that sort of culture which should be addressed to the intuitive faculties is, that it abounds in sudden transitions and contrasts, and as well in its subjects, as in the mode of presenting them. A changeful, desultory, rambling style in offering to the mind those objects that are intended to elicit its spontaneous energies, best secures our purpose; for it is a law of the human mind that, while the active powers can effect little apart from a strict observance of order, the passive powers, on the contrary, receive their happiest

excitement from the very absence of order. The experienced teacher, although he may not happen to have defined this rule for himself, in so many words, will, I think, on recollection, acknowledge that it is founded in nature, and that, unconsciously, he has been acting upon it.

Now, in adherence to this, as I think, very important rule, I would always be ready to seize opportunities, or would court or create them, on which to make the most extreme and abrupt transitions, while looking out for the means of eliciting the sense of analogy. For example—

If the attention of children has been, for a time, fixed upon some such physical analogies as those above referred to, the apparently casual opening of Milton or of Shakspeare, gives opportunity to introduce a widely different class of ideas; and yet a class equally bearing upon our present purpose. This sort of exercise, among purely intellectual or poetical analogies, may need to be a little exemplified.

I have already referred to the Æsopian Fable, as distinguished from fiction, in the higher sense of the term; and again, as needing to be kept apart from those analogies that belong to natural history, and which are strictly real. But the direct or proper use of the Fable, or Apologue, has reference to the sense of analogy when it involves some moral or political sentiment or principle of conduct. But here, let it be clearly

understood that it is not "the Moral" of the fable, or the supplementary exposition and improvement of it that we care for: this corollary is of little or no value; children may pick up some practical inference from their reading of fables if they please; but we take other and better means for teaching them morality. The most pertinent sort of moral to a fable, is an actual instance, drawn from common life. What we are now seeking for is a mild stimulus to the mind, arising from the whimsical alliance of human sentiments, and modes of action, with the habits and physical peculiarities of the inferior orders. To listen to the fox and crow, in parley; or the wolf and the crane, or the lion and the ass; and each adhering, with dramatic propriety, to its actual propensities, while it personates an analogous human character, excites a pleasurable surprise, and quickens that sense of analogy which leads on, insensibly, toward abstraction and reasoning.

The distinctive characters of animals, in fact, bear such an analogy to the varieties of human character, as has in all ages suggested the mythic form of instruction, and such as imparts to Fable a degree of fixedness, or one might say authenticity, which hardly admits of its being disturbed. The relative dispositions and habits of the bee and the wasp, of the dog and the wolf and the fox, and the moral picturesqueness of the temper which we attribute to the ass, the magpie, the

parrot, the viper, the owl, the jackal, the ape, are such as to force themselves upon our notice, as samples of humanity in caricature. The first stirring of intellectuality in a people, as they emerge from barbarism, shows itself by catching at these same analogies; and what is true of a nation in its infancy, is true of childhood itself; for the mind no sooner opens than it seizes upon those very resemblances, and nourishes itself with them. The usage of employing the Æsopian Fable in the conveyance of languages, must be considered as well adapted for securing several ends; inasmuch as, while it affords a sparkling entertainment of the sort we are now speaking of, it brings together, almost exclusively, the descriptive portion of language, an early familiarity with which, is in itself, as we have said, so highly important.

The analogies embodied in national proverbs, apophthegms, and colloquial maxims of prudence, though of a different kind, are not to be neglected. Such of them as embody a sentiment which in itself is intelligible to children, are proper for stimulating their perception of relationship. Without any desecration, the Proverbs of Solomon may be had recourse to for this very purpose; that is to say, those of them that turn upon a figure; for a large proportion are merely didactic affirmations, or laconic expressions of the general results of experience. But there are more than a few that are at once tropical, and

intelligible, even to a young child; and they may be propounded as riddles to be solved by whoever of the circle can do so the soonest, and the most correctly. It may be asked, for example—

Why the way of the slothful man is a hedge of thorns?
On what account may it be said that envy is the rottenness of the bones?
Why is a sluggard to him that sendeth him, like smoke to the eyes, and as vinegar to the teeth?
Who is it that scattereth, and yet increaseth? or—
Who that withholdeth more than is meet, but it tendeth to poverty?
Who is it that maketh himself rich, and yet hath nothing? and who maketh himself poor, yet hath great riches?
How is it that he who ruleth his spirit, is better than he that taketh a city?
Why had one better meet a bear bereaved of her whelps, than a fool in his folly?
Why are the words of a talebearer as wounds?
How is wine a mocker?
How is it that poverty comes upon the slothful as one that travelleth, and want as an armed man?

Pithy national proverbs usually involve wit as well as mere analogy; and therefore, when this condiment is not of too refined a species, they quicken the faculties so much the more effectively. The teacher may easily make his selection (always under the guidance of good taste) and he will find some of the best for this purpose among the popular adages of the Spaniards: a laconic and indolent people, of vivid imagination, are the most fond of this kind of ready-coined and cheap wisdom.

Pointed instances, embodying some general abstract truth, are not strictly to be classed with

analogies; but as they here fall in our way, they may be mentioned, as affording a similar exercise to the opening mind.—A burnt child dreads the fire, is a plain affirmation, which will be understood as nothing more, unless it be adduced on some occasion when the terms require to be converted, to agree with the facts: as if, when one had just fallen into the water.

The brief apologue, extended and converted into allegory, affords an excellent means of stimulating ingenuity and curiosity at once, on the ground of analogy. Many well known specimens of this sort of literature are accessible in every family; nor need they be named. But I would recommend to the teacher, who may have sufficient fertility of invention, and command of language for the purpose, to indulge himself—or I should now say herself, at times such as the idle twilight half hour, when she is importuned for "a story," in attempting a sort of familiar prosopopœia, embodying the characteristics of nature: such as the seasons, or the months singly, or day and night; or the continents: or the broad features of different countries may be depicted in allegorical language. Some happy instances of this kind are found in the Evenings at Home; and (I might add) in the Contributions of Q.Q. I have seen the eyes of children of four years old sparkling with the liveliest pleasure, while listening to extemporaneous inventions of this sort, and while

each was eagerly endeavouring to be the first of the circle to decipher the mystery. Allegorical exhibitions of the virtues and vices are neither so attractive, nor so intelligible, to children, as those which embody physical appearances.

These entertainments are for children; that is to say, for those who belong to our second stage of culture. If we have to do with the next era of early life, exercises of a different sort are to be had recourse to; and for finding such, as related to the subject now before us, I should open our standard poets. But let the teacher clearly keep in view what it is we are in quest of; which is not—the higher and principal elements of poetry, but rather certain of its subsidiary ingredients;—particularly those phrases the beauty of which turns upon figures, and such figures as bring together some point of harmony between the natural, and the moral, or intellectual world. With this intention we need not look beyond the pages of Milton and Shakspeare: indeed there is a real advantage in keeping the minds of young persons within certain boundaries. By use and familiarity with Milton's style of analogy, and with that of Shakspeare, dissimilar as they are, a greater readiness is acquired in catching with precision, the force of each new allusion.

Some passage selected on account of its richness in figurative analogies, having been read, each figure it contains is to be analyzed, in its turn. An ordinary measure of imaginative

feeling is enough for conducting an exercise of this sort. Young persons whose spontaneous tastes, and whose love of nature have not been spoiled by forcing upon them the pedantry of a factitious admiration of the imagery of greek and latin poetry, are the most likely to relish, and to understand, the figurative style of our own poets. A boy, thoroughly drilled to the classics, would be reminded of nothing but the goddess Aurora in the lines—

> Now morn, her rosy step in th' eastern clime
> Advancing, sowed the earth with orient pearl—

and in catching this allusion, he would probably lose all the richness of the language. But if there be no such artificial preoccupation of the mind by the hackneyed mythology of Greece, then the figures produce their full effect; and each clause fills the imagination with a conception of natural beauty. In innumerable places the adult reader, whose sense has been cloyed with often repeated phrases, cannot without difficulty realize the pleasures of a fresh seen and splendid analogy. In opening therefore the path to such enjoyments, for the young, we should endeavour to go back to the unblunted sensations of youth; and in giving indulgence to every unsophisticated feeling, should kindle those of our hearers. It will be easy for the well-informed teacher to select lines or passages which, by contrast or alliance of subject, may serve to enhance the effect, one

of the other, as if the one just quoted were compared with this—

——— for the sun
Declined, was hasting now with prone career
To th' ocean isles; and in the ascending scale
Of heaven, the stars that usher evening rose.—

Metaphors are to be distinguished from analogical phrases; and in exercises such as we are speaking of, they less directly serve to concentrate the mind upon the allied ideas: as—

Thither came Uriel, gliding through the even
On a sun beam, swift as a shooting star
In autumn thwarts the night.

The propriety and beauty of the comparison may indeed be perceived, and admired; but the feeling so excited wants point and suddenness. The passage following Uriel's return—

On that bright beam whose point now raised—

—offers in each line, an analogic phrase entirely fit for the purpose we have in view;

———twilight grey
Had in her sober livery all things clad.
————————all but the wakeful nightingale:
She all night long her amorous descant sung;
Silence was pleased: now glowed the firmament
With living sapphires; Hesperus, that led
The starry host, rode brightest; till the moon,
Rising in clouded majesty, at length,
Apparent queen, unveiled her peerless light,
And o'er the dark her silver mantle threw.

When the intention is only, and in general, to awaken and cherish poetic tastes, a continuous reading, without an analysis in detail, is the method best adapted to secure this end; but with our particular purpose in view, each phrase must be dissected; and the allusion elliptically conveyed in it, must be traced home. Shakspeare will be found to afford materials more precisely such as we now want, than Milton; and as in fact, very many of his figurative lines sound, to young persons, at a first hearing, like enigmas, the discernment of the analogy, when it actually breaks upon the mind, is attended with a still more vivid feeling. Precisely the sort of compressed metaphor, or dense analogy, which we are in search of is contained in innumerable lines of Shakspeare—such as,

> O constancy, be strong upon my side!
> Set a huge mountain 'tween my heart and tongue.

Or,

> Be not fond
> To think that Cæsar bears such rebel blood,
> That will be thawed from the true quality
> With that which melteth fools.

That mixture of figures which, as in these very lines, makes the most abrupt transitions from the moral or intellectual world, to the natural, and which is condemned as a fault in inferior writers, recommends Shakspeare as adapted to

our immediate purpose ; inasmuch as these sudden turns afford at once a better trial of ingenuity, and convey more pleasure, when they are at length understood. If in the same context passages occur wherein a single analogy is slowly developed, and with an amplitude of phrases, the occasion should not be lost for varying the exercise ; so it is in this place of Julius Cæsar—

> But I am constant as the northern star.....

where the sublimity of the comparison, and its fitness, unite to stimulate the imagination. It is chiefly in the speeches and soliloquies of Shakspeare's meditative personages, that what we are in search of is to be found in the greatest abundance: as for instance—Hamlet, King Richard II., and Jaques. If the teacher would prefer to confine himself to a single play, and to put his pupils into thorough possession of Shakspeare's manner, by leading them, again and again, over the same ground, King Richard II. would perhaps suit this purpose better than any other. With the "Family Shakspeare" in hand, the most careful teacher need fear little. As You Like It, is rich in the same material. The banished Duke's vein is of like quality in this behalf, with that of Jaques. Or if we were not afraid of descending to the lower ground of broad humour, the company at the Boar's Head Eastcheap, would supply a full measure of enigmatic analogies. And here I must profess the opinion

that, as to its bearing upon the moral culture of young persons, we gain little by the squeamishness which would banish and denounce Sir John Falstaff and Bardolph: it is not thus that young minds are debilitated; rather they may be invigorated by that liberty and excursiveness of thought which traverses all regions, keeping clear only of the precincts of voluptuousness and of pseudo-refinement. Far better is it, in my mind, to allow young people to laugh at the uproarious humour of Mrs. Quickly's guests, than to let them sip Circe's cup from the hand of certain of our modern poets whom I need not name.

But if the teacher pleases, and if he will employ a little leisure in preparing an index of places, he may find in the works of our great dramatist, an endless variety of passages in which the analogies turn purely upon circumstances of external nature: and it may be well to put Milton and Shakspeare in parallel columns, when they are found employing the same materials; as for example, in collating the moonlight and starlight of the one, with those of the other.—

> How sweet the moonlight sleeps upon this bank!
> ————Look how the floor of heaven
> Is thick inlaid with patines of bright gold.

I hope, in the end, to convince my reader that I am not at all disposed to disparage the acquirement of languages; or would slacken in the least the zeal of scholar-like proficiency; but

assuredly I would make it a condition of such pursuits that the MOTHER-TONGUE should sooner or later be mastered, and in the most absolute and comprehensive manner. Now this involves far more than a mere acquaintance with all the authorized words of the language; and more too than a good measure of skill in etymological researches, or the ability to hunt a syllable from "Babel into Noah's ark:" and more than a nice perception of elegance in style: all these points of erudite and literary proficiency are important in their place and time. But beyond and above all this, what is wanted—though too seldom regarded, or actually conveyed, in a course of education, is —The knowledge and command of language, (the English language to wit) considered at once as the engine of thought, and as the record of all ideas, notions and feelings belonging to the human mind. To effect this important object completely, there is needed, what has not as yet, so far as I know, been attempted; I mean a comprehensive classification of language—say our own, on a rationally logical principle. The labour of so reducing an entire vocabulary to orders, genera, and species, and in a manner fully subserving the several purposes that should be kept in view, would not be light: although the task is by no means a desperate one. Meantime an intelligent teacher may very easily, for himself and his pupils, make some experiments in this way, the result of which will amply

reward the pains and time bestowed upon them.

In the last chapter some examples were offered of the way in which the learner might be exercised in collecting descriptive words and phrases and in putting them in apposition: and on another occasion I shall have to insist upon the advantages that may be derived from a similar treatment of the abstract terms of the language. At present, some samples are offered of the way in which the tropical and ANALOGICAL terms of the language may be gathered into clusters, and exhibited in their natural relationships. These exercises, set a-going by the teacher, are easily continued, enlarged, and repeated, by the learner.

The habit we wish to form is that which enables the mind to grasp the compass of language, in its different bearings; or to take it up, over and over again, on different sides: at first, in its simplest form, and as the representative of the vast variety of our perceptions of the external world; and in the next place, as the same words, or a large portion of them, have been transfused, and rendered available for expressing intellectual, moral, and abstruse notions, by the aid of real or imagined analogies. The subjoined examples are to be considered as nothing more than casual instances, upon which the teacher may easily improve; and which are adduced merely to exhibit the principle above stated. Intelligent young persons, after a very little practice, will find no

difficulty in chalking out similar exercises for themselves.

It might be required, for example, to collect all the more usual words, expressive of MOTION; whether *mechanical*, as solids—fluids—air or gases; or *spontaneous*, as of animals, and man; and then, instances are to be adduced of the analogical use of each of these terms. If the learner have sufficient acquaintance with our literature, the instances should all be drawn from the best writers.

MOVE. A motive is what moves the mind, in each particular instance. I would have had them writ more movingly.

QUICK. She being more quick of sight, and he of understanding, did quicken the boy's faculties, bodily and mental.

SLOW. Oh slow of heart to believe all that the prophets have spoken.

VELOCITY. MOMENTUM. By habit and exercise the operations of the mind acquire velocity; but by indulgence, the passions get too much momentum.

ACCELERATE. The great acceleration of business now present, maketh great inconvenience in time to come.

RETARD. Metaphysics have retarded the progress of real knowledge.

DIRECT. Directly, or indirectly then, to answer all in one.

OBLIQUE. He gave, at least obliquely, the first offence.

REBOUND. The imputation which he cast, rebounds upon himself.

REVOLVE. Betaking himself to retirement, he there revolved his purposes of ambition.

WHIRL. Those seldom know their own hearts who live in the whirl of business or pleasure.

TWIRL. Like a light feather twirl me round about,
And leave me in mine own low state again.

TWIST. You twist my meaning. I had no such intention.

CIRCULATE. This piece of news has been industriously circulated on all sides.

ROLL. The interests of the commonwealth roll from their proper lodgements.

SLIDE. As often as he is pressed by sound argument, he slides from the question.

TURN. Who shall turn me from my purpose?

RISE. FALL. SINK. He rose by a bold ambition; and fell by it too; and having once lost his influence over his adherents, sunk to rise no more.

Motion of fluids.

BILLOW. WAVE. Tossed upon the billows of misfortune, he became the sport of every wave.

CURRENT. TIDE. STREAM. EBB. FLOW. The strong current of opinion now sets in a contrary direction: and who shall turn the tide? it is a mighty stream, which flows and will flow, till the ebbing time comes on.

RISE. Owing to the pouring in of demands for manufactured goods, there was a sudden rise in the price of all raw materials.

FALL. The influx of strangers occasioned a fall in the wages of labour.

SINK—SUBSIDE. The excitement of the public mind on this question, subsides daily, and will soon have sunk to its ordinary level.

DELUGE. The literature of the times was deluged by pamphlets on this subject.

RUSH. Only allow the passions of the populace to find an outlet at this point, and there will be a rush which will carry all before it.

POUR. Let us endeavour to pour consolation into the wounded spirit.

DROP. With due caution we may drop a word of advice, where we cannot give counsel in a formal manner.

DISTIL. My word shall distil as the dew.

SPOUT. He has a volubility that enables him to spout, as long as he can find any to listen.

SPRINKLE. His discourse was plentifully sprinkled with classical quotations.

SPIRT. The malice of his heart spirts from his tongue.

PLUNGE. He got out of his depth when he plunged into these subjects.

It is enough just to indicate the mode of carrying on such exercises. To the above would naturally succeed the words that are expressive of motion, change, and agitation, in the atmosphere: such as—wind, storm, hurricane, commotion, eddy, breeze, gale; and the verbs—to expand, to explode, to exhale, to waft, to ruffle; and twenty more, each of which is ordinarily employed in an analogical sense.

The spontaneous motions of living beings would come next, such as—run, fly, swim, walk, creep, jump, leap, spring, start, climb, advance, retire, recede, slide, sidle, waddle, bow, cringe, stumble, strike, rap, lift, knock, bear, carry, bring, fetch; and then again, the specific actions of artificial life, as—build, overturn, divide, shape, grind, crush, split, shake, hammer, saw, bore, pierce, stick, sew, cobble, mend, cover, break, gild, varnish, paint, engrave, adorn, deface, press, draw, shift, throw, roll, wrap; and some hundreds of the like kind, every one of which subserves the uses of the speaker and writer, in a sense, or in several senses, removed, by one or two degrees, from its primitive significance.

In like manner, we may go on to assemble, for

example—all words related to LIGHT and DARKNESS, to COMBUSTION, to the GROWTH, and DECAY of vegetables; and again of animals. Each of the senses also, confining ourselves to those words that relate immediately to the perceptive faculty, affords its set of terms, which, again, are made convertible to the more recondite purposes of moral and intellectual communication. Thus—

Belonging to the EYE—we have, and in a metaphoric sense—to see, discern, descry, contemplate, gaze upon; and the words—conspicuous, perspicuous, luminous, clear, obscure, distinct, manifest.

Belonging to the EAR—To hear, hearken, listen, attend, to be deaf.

Belonging to the TOUCH—To feel, handle, blunt, sharpen, to be rough, smooth, slippery, hard, soft, obtuse, harsh, abrupt, broken, impenetrable, untractable, obdurate, stiff, pliable, warm, cold, chilling, tickling.

Belonging to the TASTE—Sweet, bitter, sour, acrid, pungent, sharp, cloying, luscious, crude, loathsome, delicious.

Belonging to the SMELL—Fragant, stifling, putrescent, grateful.

It is manifest that a well digested collection of physical terms, or words indicative of the principal elements of our bodily consciousness, and of the great features of the material world, would serve the purpose of collecting into groups the entire vocabulary of intellectual and moral discourse; and then, if each term, considered in its natural connexion, that is to say, its relation to other words of kindred original import, were

exemplified, not in one or two instances only, but in five or six; if this were done, a mind so trained would, in fact, have gone over the wide field of human nature, as to its recondite elements.

In the preceding chapter I directed the reader's attention to the two distinct but combined purposes—of conferring upon the learner, first, a knowledge and command of language, and then, a knowledge, intimate and precise, of the phenomena of the material world, by the means of language, which in fact is a record of those appearances. And now, if we wish to pass inward, toward the world of mind, and open to the learner the abyss of the human bosom, or if we would make a preparation, ample and exact, for the study of mental philosophy, what course can be taken so natural, so simple, so efficacious and comprehensive, as that of bringing the entire compass of analogical terms which constitute the RECORD of mental phenomena, under an orderly review? And we attempt this, not on the ground of some questionable theory of intellectual science; but by merely taking up and examining—one by one, and in their natural relationships, all those primitives, whence the human mind has actually drawn the means for expressing the wide variety of its abstract notions, and of its feelings. This, I am humbly of opinion, is the best initiation in metaphysics; or in what is better than metaphysics—a genuine knowledge of the workings

of the human mind: and I am sure that the process is of a kind that may be made inviting to all who are really susceptible of intellectual culture.

Along with exercises such as the above, and in the course of the analogies which we trace, connecting the primary with the intellectual sense of words, it will be well to mix such as consist in the analysis of those terms, of this same class, which have long since dropped their primitive significance, and which now suggest no idea but the one that has been superinduced. Thus, we never recollect the primitive ideas to which the etymology of the words consider, meditate, apprehend, would lead us; and yet it is useful (entirely apart from the cultivation of etymological acumen) to unravel the knot, or shall we rather say, to break the shell of derivative terms, so as to discover the natural analogy whence they may have borrowed their elements. The very same faculty—the sense of analogy, is stimulated by this different process.

Intellectual and moral derivative terms might be arranged, with a view to our immediate purpose, under three heads; the first, comprising those which still retain, in full force, their primitive import; and which are only borrowed on occasions when they are to be applied to the conveyance of abstract notions: such are several of the words specified in the foregoing lists, as—sprinkle, spout, leap, dabble, grapple, run, stand,

hold; or the epithets—lofty, low, broad, deep, pointed, blunt.

The second class would include the very opposite of these; that is to say, words which have now entirely lost their hold of the primitive idea, and which are used always and solely in a mental sense: such are the words—meditate, consider, ponder, expect, admire; and—love, wrath, melancholy, terror, doubt, ambition.

The third class comes between these two, and consists of terms which are convertible, either to the primitive, or to the derivative sense; or which, in every instance are fixed in a natural, or an intellectual meaning, by the connexion wherein they stand: such are the words—weigh, warm, chill, awaken, pursue, follow, flinch, unbend, relax, overwhelm, immerge.

In an intelligent family, where the best books are read and listened to, and where books of reference are always at hand, the scrutiny of the analogical sense of words may be made a matter of amusement, in the intervals of serious study. Or a set of words may be given out, on cards, the resolution of which, according to every one's ability, is to be produced at an appointed time. Even the preparatory collection of words for such exercises, may be given, itself as an exercise, to the elder children: the principle of the assortment being first stated; as thus.—

Let it be required to produce a list of words which, although ordinarily employed in their

primitive and natural sense, may, without impropriety, be converted to the purpose of conveying notions belonging to the intellectual and moral world: such as (those above-mentioned, under the first head, and) the words—

(*Verbs.*)	(*Substantives.*)	(*Adjectives.*)
Illuminate	Heart	Sweet
Darken	Bile	Sour
Prop	Stomach	Bitter
Bolster	Spleen	Acrid
Undermine	Marrow	Crude
Devour	Hand	Sharp
Digest	Handle	Light
Handle	Branch	Heavy
Tread	Root	Dull
Sift	Stock	Quick
Winnow	Shoot	Slow
Harrow	Germ	Shining
Plough	Seed	Empty
Dig	Graft	Full
Sow	Kernel	Rich
Reap	Fruit	Poor

Or; give a list of words of intellectual or moral import, which, although manifestly derived from natural ideas, no longer recall their etymology, or suggest any but a purely mental notion; such as (the instances named above, under the second head, or) the words—

(*Verbs.*)	(*Substantives.*)	(*Adjectives.*)
Examine	Pride	Sincere
Discuss	Diligence	Cordial
Exaggerate	Vigilance	Suspicious
Excuse	Caution	Crafty
Induce	Valour	Jealous

(*Verbs.*)	(*Substantives.*)	(*Adjectives.*)
Conduce	Virtue	Wary
Cogitate	Acuteness	Circumspect
Speak	Sagacity	Witty
Argue	Energy	Alert
Quarrel	Wisdom	Prudent

Or again.—Let the task be to produce a set of words which, in their ordinary use, stand evenly related to the material, and the immaterial worlds; and which must take their actual sense always from the connexion where they are found; such as (the words mentioned above as examples under the third head, or) these.—

(*Verbs.*)	(*Substantives.*)	(*Adjectives.*)
Culture	Force	Firm
Reflect	Tenacity	Pure
Strengthen	Capacity	Simple
Weaken	Compass	Volatile
Recall	Object	Languid
Listen	Matter	Vital
See	Substance	Mortal
Feel	Form	Smooth
Taste	Gravity	Rough
Hurt	Levity	Dazzling
Rend	Continuity	Brilliant
Heal	Extent	Obscure

Lists of this kind, as is manifest, may be multiplied and varied almost without end; and they may be prepared, at different times, on different principles of association. The next part of the intended process consists in the analysis of each word in turn; or the tracing the analogy which seems, in the first instance, to have suggested

the application of the material idea to an abstruse notion. And in conducting such an analysis it is not an erudite historical inquiry into etymologies that should be attempted; but merely the discovery of the spontaneous course of the human mind, in devising the means of oral communication on subjects impalpable and invisible. Two or three examples of this sort of scrutiny will be enough to explain the method intended; —a method readily pursued by any teacher of ordinary intelligence and acquirements. In truth, young persons of active minds need only to be set off, in this way, and they will go on, with very little guidance.

Disappoint. A point, *punctum*, is the centre or fixing spot, at which, by means of a sharp instrument, any thing is held to its place. Ap is ad—to. Dis means separation, division, partition; and so expresses the negation of what is positive in the word to which it is affixed; like the sign — minus, in algebraic notation. To dis-ap-point is therefore to unfix that which had been fastened to its place.

Ambition. Am—*αμφι*, round about: *ire*, to go. The highest honours and emoluments, for which there are always many competitors, and which are therefore watched and guarded by many eager expectant eyes, are not, like the common goods of life, and which are the objects of industry, to be obtained in a straightforward course, by whoever will take the trouble to seek

them; but by such a going round about, as shall escape the notice of others, until the aspirant has nearly attained his object.

INDUSTRY. *Struo*, Στρωω, to spread, pile, prepare: indus—*intus*, within:—the providing, preparing and spreading out in order, whatever is needed for the comfort of a family.

MEDITATE. (According to etymologists, from the greek μελετᾶν, μελει.) But probably from mid—middle, and *sto, stare*, to stand; or, come to a stand, in the midst of any business, as if to recollect oneself.

COGITATE. *Cogo*, drive together, or assemble: *co*, together, *ago*, to drive; and perhaps, as above, involving the latin *sto, stare;* as if cogitare were cogistare, and cogito cogi-sto.

The many English words that are compounded from the latin *dux*, a leader, and *ducere*, to lead, may afford easy exercises, almost to the youngest children, who have made any proficiency in language: and if they have been reminded of the meaning of the several affixes, *in, intro, con, pro, de, se, ad, re*, they will find amusement in tracing the primitive ideas, whence have come the meaning of the words induce, introduce, conduce, produce, deduce, seduce, adduce, reduce.

The exercise may sometimes be confined to words of greek origin; sometimes to those of latin derivation; and at others, to the saxon or german, by which means the process may be

adapted to learners of different degrees of proficiency: and in truth, it is a general rule, that every species of classification has its use, in giving the mind a readiness in the orderly and instantaneous disposal of its stores. Let it be required to trace to their natural origin the words—

(*English.*)	(*Latin.*)	(*Greek.*)
Love	Examine	Melancholy
Hate	Excuse	Hypocrisy
Wrath	Consider	Idolatry
Speak	Edify	Grumble
Strive	Construct	Babble
Break	Inform	Mix
Shall	Voluntary	Will—would

The last word on this list, the monosyllable WILL, with its preterite and conditional, WOULD, may be taken as an instance of derivation from very simple circumstances, where there is the least appearance of composition, or of artificial construction in the word itself. *βουλη*, counsel, or a deliberate determination, formed after a hearing of reasons, becomes, by a customary change of the initial letter, woulee (in latin *volo*) which easily slides into—*will*, and *would*. But *βουλη* itself is from *βαλλω*, to cast;—or, in this connexion, to *ballot*, or throw the bean, or the ball, into the vase or voting box, after a question has been duly debated. I WILL—emphatically pronounced, means then—I have considered all that may be said on the point of conduct in question;

and I now vote, or ballot, accordingly: my resolution is taken.

Few persons, perhaps, among those engaged in education, are fully aware, either of the great and various advantages resulting from a thoroughly digested and comprehensive knowledge of our own language, or of the ease with which such an acquirement may be made. On this ground far more might be achieved than is often attempted; nor should I fear to abide by the issue of a series of experiments, adapted to the purpose of exhibiting the comparative practical effects, on the one side, of an elaborate classical education, reaching its acme, let us say, in the production of some faultless greek verses; and on the other side, of an education purely English; but so managed as to lodge the entire compass of the mother tongue in the mind, on a philosophically digested system, and as related, first to the several faculties of the mind, and secondly, to the specific uses of active and professional life. My firm belief is that the balance, as to power over the minds of others, and as to practical efficiency, in carrying on the mind's own operations, would turn decisively in favour of the latter method. But in fact the two are not incompatible.

CHAPTER XII.

THE ANALOGICAL FEELING AND HABIT, PREPARATORY TO THE EXPANSION OF THE ABSTRACTIVE AND REASONING FACULTIES.

WE come now to what must be called, not indeed a resting place; but rather a turning point, in the course of Intellectual Culture. It is essential to the successful application of the system I am endeavouring to unfold, that this crisis of the principle which follows nature, in developing the faculties, should be clearly understood.

Every one is conscious of two perfectly distinct states of the mind, occupying it at different times: (we are now speaking of what is *intellectual* merely) in one of these states an object, or an idea, is presented to the mind, which, whether it wills or not, and always without any sensible effort, admits the idea, and discerns its relationship to any others with which it may stand connected. This may be called INTUITION; and with intuition nature has intimately connected various simple emotions of pleasure, or of

curiosity, the effect of which is to stimulate the mind, during its growing time especially, and to lead it onward always in the path of knowledge. In the way of simple intuition, skilfully superintended, the mind may not only be replenished with ideas, in vast variety, but may be put into a condition the most favourable possible for advancing on the more arduous part of its course.

But beside this intuition, and on the ground of it, the mind gradually acquires the power of fixing itself upon a certain series of ideas; and along with this power it feels, in greater or less degrees, an active desire to do so. Hence comes effort and labour, directed to particular ends, and to means fit for the achievement of those ends; and hence all those fruits of intellectual enterprise which constitute the immeasurable odds between the savage and the civilized condition of human life; or between the child and the man.

The process of education naturally divides itself therefore into two portions, corresponding with this partition of our mental existence, into the Intuitive, and the Active: or, in other words, education should be made to accord with the distinction between Perception, and Power—between the Accumulative and the Operative faculties; the former being the earliest expanded, and the latter the latest; yet the development of the one going on long after that of the others has come into full course.

To the first, that is the accumulative, or intui-

tive faculties, we have already given some attention, while suggesting hints for the culture of the Conceptive faculty, and of the Sense of Resemblance, and Analogy. Next should come the training of those faculties which imply more or less of conscious effort, and which, by their different degrees of activity, quickly render conspicuous the original difference between mind and mind, as to Power. These faculties of labour are, as I have enumerated them already —the Memory, the faculty of Abstraction, and the Ratiocinative faculty.

But, anxious as I am to insure the reader's attention to the broad and very important distinction above stated, I have thought it best to conclude the present volume at the point where the one process of culture should be succeeded by the other: —the ends aimed at in the two, and the methods of procedure, being, for the most part, very dissimilar. What now remains, and which is the subject of this concluding chapter, is to say something of that principle of transition which, in conformity with the constitution of the human mind, leads on, almost insensibly, from the culture of the Intuitive, to the exercise of the Operative faculties.

Lord Bacon (and Rochefoucauld—in his peculiar and sinister style) has affirmed, what may well be granted, that men, individually, and collectively, might accomplish far more than they actually attempt, or even think of, did they but

fully know, and steadily employ, the powers conferred upon the human mind. And moreover it may be said that far more might be achieved by each individual, whatever be his native endowments, if only, in the early training of the reason, the working of the active faculties were delayed until after the intuitive faculties had largely gathered in materials. The difference between working *with* a fund of ideas, and working *for* a fund, is a circumstance on which depends the healthy growth, or the early stunting of the mind. In the ordinary course of education, the minds of children are strained and stimulated upon inanition. Labour comes first; feasting afterwards—if ever. But in the intellectual world the rule does not hold—He that will not work, neither let him eat: but rather this—The labourer must first be partaker of the fruits.

An expression frequently applied to the over anxious endeavours of some teachers to impart universal information—that it is a *cramming* the mind, properly attaches, with its implied rebuke, to those methods which subvert what is, I think, the natural order of mental culture:—that is to say, which bring a great stress to bear upon the *powers*, before the *perceptions* have been furnished with their proper objects and aliment. No mind can fairly be said to have been crammed with that information which, how various soever or extensive it may be, has been all imbibed spontaneously and unconsciously; or just as the body

admits fluids, in large quantities, through the absorbents. Now, if my meaning in the latter portion of this volume has been understood, it will be admitted that, by skilfully addressing ourselves to the intuitive faculties alone, and these gently stimulated by pleasurable emotions, the minds of children may be put in a condition to which we might fairly apply the phrase—intellectual opulence. This wealth is not indeed in itself power; but it is the means of power. And now I beg the reader's attention while I point out the first steps of the mind's gradual advance from wealth to power: and by power, in this instance, I mean—first, the ability to *apprehend* or admit truth, which redeems a man from ignorance, prejudice, and illusion; and secondly, the power to *convey* truth, which confers upon whoever possesses it a real authority over those immediately around him; and lastly, the power to *discover* truth, which gives to a few minds a rightful dominion over the many, a dominion enduring from age to age.

Many and various operations of the mind, not now to be particularly described, are comprehended in the ordinary sense of the word—reasoning; such as—the devising of means for discovering obscure or abstruse facts—the invention, and the most proper disposal of arguments, so as shall best bring others over to our opinion; and —the compacting of facts in an inferential order, so as may really justify such and such conclusions.

Meantime the elements of the mental process on which every sort of reasoning rests, are of a very simple sort; and they imply two powers of perception, or two species of intuition, the one being an enlargement or expansion of the other, and involving more of active force. Every sort of reasoning is reducible to a series of perceptions—instantaneous, and involuntary, and amounting to this—That two things or notions are the same, or are not the same; or that they stand in such or such a relation one to the other. When one such relation of sameness or of difference, or of proportion, has been accepted by the mind, then comes another set, or we may better say—*brace* of relationships, taking hold of the preceding one by some similar link of sameness or proportion: and to this perhaps succeeds a third, in like manner linked to its immediate predecessor.

In this process there is, as we have said, first —the intuition in regard to two single objects; and secondly, an intuition in regard to the *series* of intuitions. Now, even the power to admit the simple intuition, or rudiment of reasoning, is not always found apart from some culture and practice; and many minds never reach so far as to this point. But the power to admit, and the power to keep hold of the second sort of intuitions, and which is essential to what is called a process of reasoning, or an argument, is always the result, either of much culture, or of much

practice;—it is a power to be acquired. In mathematical reasoning, we may feel our way, step by step, and go on, as it were, blindly, or without any grasping of the entire process; but in every other kind of reasoning, dependent upon so ambiguous an instrument as language, there is no safety or certainty except in a constant exertion of this grasping power; or to change the figure—in looking every moment from end to end of the path we are treading, and in taking care that, at every step, we keep the exact line. Mathematical reasoning is a going on between two walls: moral reasoning is the finding, and the holding to a path over a common.

As it is not my intention in this place, to treat the subject of reasoning, in a formal manner, I abstain from elucidations and examples, wishing only to fix the reader's attention upon the fact, that the rudiment of reasoning, of whatever sort, is INTUITION:—intuition simple, and intuition complex. This being the case, it is manifest that in eliciting and exercising the sense of resemblance, and in giving it acuteness, we are making the true preparation for sound reasoning: and further, that, in advancing from the sense of resemblance, to the perception of analogy, we are leading the mind forward in a course which enables it intuitively to discern those relations of sameness which are of a somewhat abstruse kind: such for instance as the sameness of law, or principle, or mode, of operation, in the system of nature.

There are some who reason inconclusively, or confusedly, because they do not link the series of relations well; or do not retain their hold of the chain in its entireness; but there are many more who never reason at all, or to no good purpose, simply because the rudimental faculty—the first perceptive power, has acquired no precision, or no tenacity. Such persons may have learned logic, and may be able to build, and to knock down, paper-houses of syllogisms; but there is no reality, no vitality in the process:—they are convinced of nothing by the result of all this labour: nor do they find themselves able to produce conviction in other minds.

In truth, very much of what is done and taught in the course of a common education, tells for little or nothing in active life, because while the after stages of the reasoning process have been, with some industry, attended to, the preliminary work of training the intuitive faculties has been wholly forgotten. In other words, logic may have been taught and learned; but the rudiment of reasoning has not been acquired. Now, if one or the other part of this process of culture must be slighted, it were better to neglect the latter; because, apart from the first, the second is absolutely of no avail; but if the first has been duly regarded, the second will follow, almost of itself. Good reasoners and efficient speakers, in relation to the common interests of life, are not the proficients in college logic; but

they are those who are gifted with the keenest and the quickest perceptions of relation and analogy. If a man be eminently endowed in this manner, his associates and his antagonists, and especially the latter, will help him to correct his early errors in putting arguments together; and will make him, in the end, he knows not how, an efficient reasoner.

I think it will hardly be denied that if the children of a family, gifted in a fair degree with intelligence, were, during the course of their education, exercised in the pursuit of analogies, physical and moral, in some such manner as that indicated in the last chapter, they would, in due time, stand at no great remove from the ground of exact reasoning; and in fact, would spontaneously advance upon that ground. The animated feeling that attends the discernment of an analogy quickens the curiosity to pursue the connexion of facts a little further, and further still; and such a pursuit is nothing else but reasoning. The progression therefore from the simplest perception of resemblance, to the more recondite perception of analogy, and thence forward to the remotest results of elaborate reasoning, is imperceptible, and almost involuntary, and such as is sure to take place with minds in any good measure susceptible of culture. The process indicated in the preceding pages, is, as I believe, what ought to fill the first chapter of a genuine logic.

But it is an important fact, that, while many conclusions, in all branches of intellectual, moral and political science, are to be reached only in the circuitous road of long and elaborate reasoning, it is altogether otherwise with the most momentous truths; for these great principles usually lie only at the very next remove from the mind's simplest intuitions; or if not found there, they are vainly sought for at the end of refined arguments. Hence it has happened, in relation to such prime truths, that, while they are seen and accepted by unsophisticated minds, they have so often escaped the grasp of subtile reasoners, who, spurning what might be obtained without toil, have lost what is never to be elicited by its aid.

Much need not be said to prove that, in any case in which truth stands, as we may say, immediately within the line of our intuitions, peculiar importance attaches to the culture of that faculty to which such intuitions belong; and that, upon its clearness, vivacity, simplicity, and integrity, will depend the ready attainment, and the firm possession of the most momentous of all our convictions. Nothing but perplexity, despondency, vacillation, or what is equally to be deprecated, the delusive gratification of following endless sophistries, are the consequences of that state of mind which results from great activity and acuteness of the ratiocinative powers, along with an equal obtuseness, or sluggishness, or

laxity of the perceptive and intuitive faculties. Such minds, for ever doubting whatever is the most certain, and trusting to whatever is the most fallacious—always learning, and never coming to the knowledge of the truth, are in the deplorable condition of one who, with the limbs and vigour of a Samson, has lost his eyes.

I do not know that there is any maxim of intellectual education more important than the one we have now in view, and which enjoins that the intuitive faculties should be cherished and brought into a state of healthful vivacity before the art of ratiocination is attempted. The worst consequences, intellectual and moral, are every day to be seen resulting from the conjunction of dull or confused perceptions, with astute and subtile dialectic powers; I feel emboldened therefore in attaching more than a little moment to the process of culture which it is the object of this work to recommend, and in which sedulous regard is paid to the order of nature, as regulating the course of intellectual treatment. To the practice of inverting this order, ought to be attributed the discouraging fact that the most highly educated men have often been the last to yield submission to the dictates of common sense.

I will now bring this chapter and volume to a close by exemplifying the principle to which I am attaching so much importance, as it affects that primary Truth—the existence and attributes of the Creator and Ruler of the Universe. And

this subject I may lay claim to, belonging as it does to intellectual discipline, notwithstanding that I disclaim the intention to treat of religious education.

The best works on Natural Theology, and especially those that are of recent date, do not really consist of a chain of reasoning, as it is called, or of a consecutive argument, starting from a certain point, and advancing step by step, until the long foreseen conclusion has been legitimately attained; but rather, they present an accumulation, or a selected assemblage of independent instances, each having the same argumentative value; and each, in a more or less striking manner, presenting the same elements of proof, and all possessing a nearly equal logical value. It is as when, in corroboration of some alleged fact, twenty, or twice twenty witnesses are brought forward, all telling substantially the same story.

The wing of a gnat, considered in relation to the purposes it actually subserves, contains all the argument which we find expanded in massive volumes of Natural Theology. Or if we imagine a universal conflagration to have reduced to ashes every organized substance on the earth's surface —leaving only a single straw, this one wreck of animated nature, understood in its structure and intention, would be text enough, whence sacred philosophy might draw all its fundamental principles. Nevertheless, as the human mind

does not often possess the condensed power requisite for founding its convictions upon so narrow a basis—how solid soever that basis may be, it is well that we should yield the point of rigid argumentation, and be content to produce that conviction by repetition and accumulation of proof, which we might justly have enforced by means of a single and conclusive instance.

In truth, what is aimed at in works on Natural Theology, is rather *impression* than formal conviction; and for securing this end it is manifest that five instances are better than one, and that twenty are better than five, and a hundred better than twenty. A mind must be cold as well as severe, that is not more affected by a well compacted volume of exemplifications of the wisdom and goodness of God in creation, than it had been by the perusal of the first page, in which the principle of the argument is announced.

But having granted this, we must return to our present purpose, and look a little more narrowly to the real nature of the proof whence, in modes a thousand ways diversified, and gathered from ten thousand sources, is derived the momentous inference whereon rests all virtue, all truth, all peace, and all hope, for man.

What is meant by proofs of the power, wisdom, and goodness of God, in the construction of the vegetable and sentient orders, is, so many instances of ANALOGY, connecting, by an instanta-

neous sympathy, certain elements of our own rational consciousness with the attributes of THE MIND UNSEEN. For example: we find ourselves to be endowed with POWER, which, to a certain extent, enables us to alter the position, and to modify the influences of the material elements about us; we also possess REASON, whereby we conceive of a certain state of things as possible, and as desirable, and whereby we devise the means fit for giving actual existence to what we have so imagined. Moreover, we are conscious of a lively pleasure in beholding, and in promoting, the enjoyments of others; and this feeling, which we call BENEVOLENCE, impels us to exert our power and reason, for the good of others.

Now as often as any thing comes under our observation which appears to be what we might ourselves have effected, had our power and skill been equal to the production of it, we involuntarily assign it to the agency of a mind like our own, although, perhaps, of far superior endowments. It is not a process of reasoning that passes through our minds on such occasions; nor do we first lay down certain self-evident principles, and then advance, with cautious steps, to the inference—That this work of wisdom and benevolence which we are examining must have had a wise and benevolent author:—we feel—and justly feel it to be so.

In illustration of this natural process of thought,

let any one suppose that he has been confined in a chamber whence every ray of light is excluded; and that at length he is startled from vacancy of mind, or sleep, by a whisper, of which however, at first, he does not distinguish a word, or catch the meaning; nevertheless, the not to be mistaken tones of the human voice exclude the possibility of doubting that, where he had thought himself alone, another, and one like himself, is actually present. He listens, and this whisper becomes more audible, and at length he recognises the words—uttered with intelligent intonation—

> Now heaven in all her glory shone, and rolled
> Her motions, as the great first Mover's hand
> First wheeled their course; earth in her rich attire
> Consummate, lovely smiled.

These words, thus feelingly uttered, are enough to give him the irresistible persuasion that there is present with him in this chamber of darkness, a MIND; but whether it be lodged in a human or celestial form, he knows not; yet it is a mind; and it is one which, like his own, holds correspondence with language; it is one, like his own, alive to rhythm in the collocation of words; and, like his own, conscious of the rational sequence of ideas, and of the fitness of epithets. On the ground of this conviction, and especially if the tones of the voice be such as are the well-known accompaniments of goodness

and intelligence, he confidently attributes to his unseen companion those qualities of intellect, and those dispositions, which warrant his inviting the freest and the happiest communications. That is to say, the mere utterance of these lines has opened a world of analogies, between his own mind, and another, really though not visibly present, in the same chamber. What is necessary in order to his feeling this confident persuasion, and to his availing himself of it, is by no means the logical ability proper for groping his way through a tangle of syllogisms; but simply —a sound constitution of mind; or just that same reason and feeling in himself, of which he has the evidence, as existing in another.

But now, to extend our supposition a little further, let us imagine that, without having obtained any other evidence of the presence of a communicable spirit in this chamber of darkness than what has been afforded by the utterance of the lines which have fallen on the ear, this same person enters into converse with his unseen companion, and taking the Miltonic passage he had pronounced as the text of the conversation, the two freely confer on all subjects of natural philosophy, discussing and describing the various forms of sentient and vegetable life, as well as the principles of chemical combination, and the mechanism of the heavens. By this time then a complete correspondence has been opened between whatever is rational in the one mind, and

whatever is rational in the other: and moreover, in the compass of this various and discursive talk, there has been included a hundred points of feeling and of sentiment, as well as very many references to whatever is beautiful and sublime in nature; so that in a word, a thorough communion of souls has had place; and whether the unseen mind be an embodied one, or not;—whether a native of earth, or of some distant planet, it is quite certain to the first party, that this mind and his own are thoroughly homogeneous. Or let the same fact be expressed in another style, and we may then say, that so many points of ANALOGY have been touched in the course of this conversation, as serve to bring the two minds into full correspondence, in relation to all the principal elements of their nature. Whatever may happen to be the difference between them as to power, or knowledge, or corporeal condition, they are, essentially, of the same order. Now let the windows be thrown open, and day-light admitted into the chamber, and perhaps both might wonder at the form, the attire, the stature of the other; but this surprise could endure only a moment; and then the tranquil converse which had already been carried on in the dark, would be continued in the light.

There is however one other step to take in completing this illustration:—we suppose then that these two parties go abroad, and there actually look upon those thousand objects, ani-

mate and inanimate, earthly and celestial, of which just before they had been talking. That is to say, the very same instances of fitness, and of the adjustment of means to ends, and the very same instances of beneficent contrivance, and the very same aspects of beauty and grandeur, which, a few minutes before, had been present to the two minds, through the medium of words, are now present to them through the medium of the senses. The very same consecutiveness of cause and effect, the very same expressions of beneficence, the very same intelligible exhibitions of a devising mind which, when described in words, had convinced the one party that he was conferring with a rational nature, though unseen — a nature knowing and benevolent; these actual utterances of the soul, opening a free communion between the two, are now no longer subjected to the imperfections and the obscurity of arbitrary sounds, poorly conveying the ideas they stand for; but are offered to the reason in the perceptible forms of the objects themselves. Are then these minds, by this change in the medium of expression—a change from a less perfect, to a more perfect mode of utterance—are they thereby removed to a point more remote from the Mind, so unfolding itself in the fitness, the beauty, and the beneficence of the material world. Surely we should say the contrary.

Or we might propound our question in another form, and ask, whether fitness, beauty, and good-

ness, set forth in orderly discourse, can be held to warrant a stronger persuasion of our immediate correspondence with MIND, than is warranted by the actual inspection of the very same fitness, beauty, and goodness, in the instances so spoken of; or, in a word, is it really a better proof of intelligence to describe a world, than to make one?

If any one comes to me, with a fly on the point of a needle, and proceeds skilfully to dissect it, and to explain the mechanism of locomotion, of nutrition, and of reproduction, which the insect form embodies, he leaves me no possibility of doubting that he himself is gifted, not merely with the faculty of speech, but with reason also, and with reason like my own, and probably much superior to my own. But now is not the FLY ITSELF a palpable discourse—is it not a tangible utterance of these very same elements of reason and benevolence? The pulling the fly, limb from limb, for the purpose of exhibiting its mechanism, persuades me of the presence of an INSTRUCTOR of one like myself in faculty, although my superior in knowledge; but the living fly, in the enjoyment of its being, whirling through the air, or revelling in sweets, is surely a still better indication of the presence of a CREATOR. To describe the animal is to compel me to feel that I have a well informed mind near me; but the animal itself is immediate evidence of a creative mind, near me also.

If, in returning from my walk, and entering my study, I find the fair sheet of paper which I had left on the table, inscribed, in an unknown hand, with these words—THE HEXAGON IS THE BEST OF ALL FIGURES FOR COMBINING ROOMINESS WITH STRENGTH,—I should not merely be quite sure that some one had been there in my absence, and had written these words on the sheet; but I should recognise, in them, an abstruse principle of mathematical science, which, whether or not it had been understood by the person who actually guided the pen, in this instance, is an infallible indication of mathematical proficiency in the mind which first put the sentence together; and moreover, *that* mind and my own are, by the intervention of this proposition, brought into rational correspondence, the one with the other.

But now, let me suppose that while musing upon this mathematical verity, concerning the property of the hexagon, I return to the garden, and there looking into a beehive, find—not ink and paper indeed, or any verbal proposition, but what is better, namely,—the very same truth, worked out in wax, by a swarm of unreasoning insects. Am I not then, while looking at the beehive, brought as near to a KNOWING MIND, as I had been, just before, in reading the sentence on my study table? Or is there, or can there be more reason in words, than in the things to which they relate? What can be so irrational (if indeed the

terms have any meaning) as to suppose that the embodying of a mathematical truth in some natural work is a questionable expression of mind, while we accept, in a moment, a verbal expression of the very same principle, as an indubitable evidence of reason and knowledge?

I had been perplexing myself, let it be supposed, with the question—which is the best angle for a roof, liable to a particular sort of pressure. A friend, better informed than myself, enters, and says—The angle formed by two sides of an equilateral hexagon is what you want. I doubt this, and go through an elaborate calculation to ascertain it; but am at length satisfied that I might as well have trusted to my friend's intelligence in this instance. But suppose I draw the same answer to my question from the honeycomb—suppose I put it to the same test of calculation, and am at length convinced that this by no means obvious truth, is there acted on as often as a hive is filled with wax. Am I not then in the one case, as well as in the other, receiving immediate instruction from a mind, like my own, though a more knowing one?

When however we come to bring these rudiments of sound reason to bear upon the business of education, we find that much is required to be done in ridding the mind of certain prepossessions, that either set it wrong at the commencement, or that blunt that SENSE OF ANALOGY,

which otherwise would open an immediate and delightful correspondence between the human mind and the Creative Intelligence. To this point then our endeavours should be seriously and skilfully directed; and even if we were thinking of nothing beyond the expansion of the ratiocinative faculty, this sort of preparatory training, in reference to the rudiments of Natural Theology, would deserve the highest regard; for we can nowhere else find a subject altogether comparable to this, as adapted to the purpose of quickening that sense of analogy from which sound reasoning takes its spring.

In the first place then, it is to be remembered, that those innumerable instances of wisdom or design, and of benevolence, which the material world offers to the well-informed eye, instead of being so obtrusive as to command the attention of all, need to be inquired for: they are manifest indeed, yet only to those—who will turn aside and look for them: the creative wisdom, expressed in the forms of nature, is, in this respect, like that amount of human wisdom which is consigned to books. A man may spend all his days in a library, and be nothing benefited; for, to become partaker of this wisdom, he must open the books, one by one; and must read them, page by page. Now the common phrase—the book of nature, should be understood to mean, neither an open book, nor a clasped book; but a book on the shelf, of which those who have no curiosity,

and no industry, see nothing, except the embossed and gilded cover.

When therefore it is affirmed that the Divine Mind stands immediately revealed to our involuntary intuitions in the structure of the material world, we must be understood as intending that —The Book is to be opened, and the pages of heaven's philosophy to be perused—line by line: and this reading of the Book of Nature, as the expression of creative wisdom, should constitute a principal part of rational education; and it should do so, irrespectively of its connexion with religious education.

Again; in endeavouring to bring the minds of young persons into the most favourable position for their perceiving the intuitive evidence of the presence of the Creative Power, we are to keep in view the fact that the human mind enters upon its course, and pursues that course a long while, in the familiarizing presence of the material system, which it gazes upon and converses with, daily and hourly, before a surmise has arisen concerning it, as a WORK, or as a complicated mechanism, the product of power and skill. This after-thought has to be suggested at a time when the conception of the visible world has already linked itself with every thought, and in many ways the most intimate. It is our part, therefore, by labour and repeated efforts, to obtain a lodgement for an unobtrusive, yet thoroughly rational notion, and to place it among notions of a

vivid kind, which have become completely assimilated with all the elements of consciousness.

The products of human skill and labour are seen, every day, in every stage of their progress; and we look on while the operator takes up his materials, shapes them separately to his mind, and puts them together—fitting, and squaring, and filing, and trimming his work, until the solid reality corresponds with that conception which had been its pattern. Our mental associations therefore, in relation to human labours, embrace always—the workman and the work, the hand, the tools, and the materials. Nor is the process itself ever of so refined, or so intricate a sort as utterly to forbid our following it, with more or less of intelligence.

But all these circumstances are reversed in relation to the Divine operations. The operator is never personally seen; the instrumentality is always occult; the materials are taken up and converted to their uses by a process of corpuscular assimilation which for the most part, entirely eludes the human senses to follow it, even when aided by the highest microscopic powers; and moreover, it is a portion only of the process that can be understood, even when the end or purpose of the structure is manifest. From all which circumstances it follows that there is a mental preparation requisite, and that there are involuntary prepossessions to be removed, and positive notions to be supplied, before the world of nature

can be contemplated on even terms with the world of art. There is a culture necessary before that which, in itself, is a matter of intuition, can be fairly presented to the percipient faculty, as such.

And yet this preparatory process, besides its incalculable importance in relation to the moral and religious sentiments, involves every thing which we need much care about with a view to the initiation of the mind in the exercise of the reasoning faculties. Young persons who, by skilful training, have been set clear of the prepossessions above alluded to, and who have thus been enabled to admit, with promptitude, those analogies which, through the medium of the material world, open a correspondence between the human and the Divine Mind—such young persons, whether or not they may have become adepts in the legerdemain of Aristotle's logic, have only a few steps more to take, and they will be masters of whatever is real and practically useful in the art of reasoning.

And in itself how desirable is that vivid intuitive power—that perspicuity of mental sight, which imparts an intelligible import to whatever we see in nature, and to whatever we examine! So long as, from a misapprehension of the real conditions of the subject, the organic structures around us, animate and inanimate, are regarded as affording only certain data, whence, in a circuitous and laborious manner, we may come to

the dim conclusion—that the universe owes its origin to a wise and beneficent Creator—so long as we are used to think in this way, we occupy a twilight region, wherein we rather grope for a path, than see one; and where, at the best (to speak ingenuously) we may profess, not so much to believe, as to hold our doubts in abeyance.

A teacher who bears it in mind, as occasion serves, to lead those under his care into a true position, in relation to this important subject, will avail himself of various expedients for effecting his purpose; and as these methods stand immediately connected with that preliminary intellectual training which, in the present volume we are considering, I will advance an instance or two in illustration of my meaning. Yet be it remembered, I am not supposing that any thing like a formal lecture should be given; but rather that favourable opportunities should be seized, as they arise, for presenting such trains of thought as the following.—

Let then some very simple arithmetical equation be produced, as thus—

$$24+52\times3=114\times2\text{; or, }228.$$

Now it is clear that no one figure in this, or any such series, can be either changed, or withdrawn, without destroying the meaning and consistency of the whole: or, if you alter or withdraw a figure on the one side of the parallels, you must make a corresponding alteration among those on

the other side, so as to restore the equipoise, and to render the whole once again consistent with itself, that is to say, mathematically rational. Thus, if, for 24, you put 22, then, instead of 114, on the other side, you must say 111, and 222.

But in affirming that such an equation is correctly expressed, or that the proposition implied therein is true, you must mean that it represents a certain real relation of numbers, which relation every mind capable of calculation will instantly admit to be so. This series of figures might therefore be handed round an assembly of millions of reasonable persons, all of whom would subscribe to it as true. Or it might be used as a test of rationality; and, in the case of any two persons meeting, who were not as yet assured of each other's intellectual competency, this very equation might serve as a criterion, on both sides; and it might then constitute the commencement of a mathematical correspondence, or friendship, between these two minds; since it is certain that whoever could understand this one equation, could also understand others of a like kind; and might thence advance to problems much more complicated.

But now, in what way does this arithmetical equation serve as a link of correspondence between one rational mind and another? The mere ink marks upon the paper, or the line of Arabic figures and crosses, or a chance series of num-

bers, expressed by those figures, can have no such property; but this effect must result from the congruity of the parts, one with another; and the whole must comprise such a precise series of numbers, and these so related one to the other, as that, when those on the one side of the parallels are added together, and multiplied, in the manner expressed by the crosses, the final amount shall be neither more nor less than what is found to be the final amount on the other side. Here, then, is a collection of numbers, forming two wholes, equal one to the other; or the two halves of one whole. That therefore which renders this equation an infallible means of intercourse among rational minds, is—the fitness, or congruency of parts, balanced one against the other: it is—consistency, it is—regular consecutiveness, having a commencement, a middle, and an end, and all agreeing in the result, and excluding whatever would be superfluous or extrinsic. Now wherever we find any such equation, or any such congruency of parts, there we find MIND, expressed, perhaps in one mode, perhaps in another. Derange the figures at hazard, and then this expression of mind disappears: but as it stands, it is an utterance of reason, and it is nothing else. It would not be correct to say of any such series of figures, that it furnishes a datum, or premises, whence we may logically infer the fact of a rational existence, of which it is the product. A much shorter

course is before us, and we escape altogether from the necessity of a train of reasoning, when we say that this series of figures is—MIND UTTERED. Now mind, as we well know, is communicable in various modes; as for instance, either by articulate vibrations of the air, caused by the voice, and to which, by convention, certain ideas are attached; or by arbitrary signs, in like manner connected with ideas; or by some actual combination of elements, embodying truth in a palpable manner.

When a continuous discourse falls upon the ear, if this discourse be rational and consistent, that is to say, if it accords with our own rationality, we are not accustomed to use a circumlocution, or to say—we are warranted in assuming that this discourse *must* spring from a rational being; but we simply admit it, and with the fullest confidence, as the immediate indication of a rational nature near us. In truth, the sounds we have listened to furnish precisely the same sort of evidence, in proof of the existence of another rational mind, which is furnished to ourselves, by the order and consistency of our own thoughts, in proof of our own rational existence. I know that I am myself a rational being in no other way, and in no better, or more direct manner than that in which I am convinced of the rational existence of the mind whence those sounds proceeded, which I have listened to and understood. Whether the other

mind with which I may be holding intercourse expresses itself in articulate vibrations of the voice, or by the intervention of arbitrary marks or signs, makes no difference in the certainty of the evidence; unless indeed it be a difference in favour of our present purpose.

Another mind, instead of speaking or writing, may express a train of consistent notions by the means of some real exhibition of them. As for example: I will suppose that my teacher has been endeavouring to explain to me, verbally, the action of a pendulum and escapement, in regulating motion: but I have not fully understood him. He then has recourse to the pencil, and places before me a diagram of this mechanical contrivance; and I now gain a clearer notion of it; yet still, as he perceives, I labour under some difficulty; although I have understood quite enough to convince me that my teacher is master of a practical principle of which he can avail himself, in the way he proposes. He then, and without another word, produces an actual pendulum, put in motion by a weight, the descent of which it retards in consuming the acceleration: and he now leaves me to make myself fully acquainted with this adjustment of the rod, the bob, the weight, the line, the wheel, the escapement. But now is this last mode of expressing a mechanical truth inferior to the other two modes? or does the tangible pendulum, with its well-adjusted apparatus, obscurely express

that same product of reason which already the diagram had represented, and which, at first, the voice had uttered? or am I placed at a further remove from the mind of my teacher, when he produces the real pendulum, than I had been while his voice fell on my ear? I think the contrary, and feel that, whereas, at first, the communion of minds had been imperfect, now it is complete; for I am able, while inspecting this piece of mechanism, to mingle myself, intellectually, with the mind from whose cogitations it resulted. And if, while my teacher was actually speaking, it would have been an impertinence to have demanded a string of syllogisms in support of the assumption that I had then to do with a rational being, like myself, how impertinent would it have been to demand any such circuitous satisfaction when the still more complete expression of mind, embodied in the real machine, was under my hand!

Or let us suppose that my teacher, suddenly breaking off the lesson at the point when he had produced the diagram, had said no more; but, a while afterwards, had left in my way the actual pendulum agoing. Ought then the circumstance of his bodily absence, at the moment, to plunge me into perplexities, from which nothing but laborious reasoning can relieve me? or am I now left anxiously to inquire if this apparatus does really and truly indicate reason, and does sustain the bold assumption that it is a product

of mind? Who can think that the incidental accompaniment of the teacher's bodily presence and voice makes any difference whatever in the case supposed? The pendulum, whether the contriver of it happen to stand beside it, or have gone into the next room, or have set off on a journey—this ticking pendulum, in either case, utters just the same mechanical theorem, and declares itself a product of Reason—of reason like my own; for if it were not so, it would not to me be intelligible. It is easy to substitute one set of phrases for another, so as to make this illustration applicable to the organized structures around us: or we might place the same general principle in another point of view, as thus:—

Let us take from some botanical work a description of any species of plants, embracing its mechanical organization, or structure of solid parts, its physiology, or system of functions, and its elementary or chemical components, such as its carbon, nitrogen, iron, silex, &c., or its gums, sap, resin, woody fibre, &c., and its uses in the arts. Now, having filled a sheet with this description, which in fact comprises a detail of many instances of fitness, and adjustment, mechanical and chemical, yet all concurring in the one product—namely, a plant of such and such form and properties, we commence a process analogous to that which we lately supposed to have been attempted with the arithmetical equation; that is to say, instead of changing or with-

drawing certain figures, we change, or transpose, or withdraw, words and sentences, until the species described can no longer be recognised. A very little of this work of confusion would be enough to render the whole absurd and senseless: that is to say, if we blot out or confound the expressions of fitness and congruity, or substitute particulars inconsistent one with the other, then, although words and syllables and letters remain, the Mind which lately had been there is gone.

But now, instead of taking the *description* of the plant, let us take the living plant itself; and let us fancy ourselves to be able to strip it, one by one, of its various mechanical contrivances; and to destroy, one by one, those affinities on which its vitality and its functions depend: let us, by a sort of dissection, peel off, and throw aside, every single expression of reason which the plant embodies—first the form, then the functions, then the elementary affinities; and what is left to us at last, but a handful of dust—a little carbon, a few drops of water, a grain of iron, and a bubble of gas! Nay, we might yet go on to rob even these very elements of their congruities and their relations, until there was left—pure nihility. But this is only to say, in other words, that a plant is—an expression of Mind—and that it is nothing else; for when every thing has been removed from it which expresses mind, the residuum amounts to not so much as a spoonful of ashes!

If the counterpoised series of numbers on the two sides of an arithmetical equation be an expression of mind, or utterance of reason, so is the counterpoised interaction and the congruence of material elements in the plant; and so is the correspondence of its mechanical parts, and so is that inscrutable harmony of chemical and mechanical principles which issues in its growth and fructification. And if an arithmetical equation so voluminous as to occupy a folio page, and which yet should be strictly demonstrable, must be held to indicate a refinement of intelligence and knowledge, much more does that combination of parts and elements which fills page after page, in the complete description of a plant, indicate also a refinement of intelligence and knowledge. A plant then, is not *a proof* of creative wisdom; but an immediate expression of that wisdom; and it is a more direct, and a much less ambiguous utterance of it than is the sound of the human voice, discoursing of the same vegetable forms and functions.

Not only do our natural prepossessions, and the early habits of the mind (already referred to) stand in the way of our entertaining clear notions on this subject; but the elaborate style of argument sometimes met with in treatises of natural theology, confirms the circuitous mode of thinking which we fall into; nor is it a little that will suffice for leading young persons back to an unsophisticated state of feeling, such as shall

enable them to look upon nature, just as they read a book, or as they listen to the voice of their teacher, beholding there—not as in a glass darkly, but with open eye, so much of the Divine Intelligence, in its attributes of power, wisdom, and goodness, as may be expressed through the medium of what is finite, to finite minds.

If reasoning be at all necessary in establishing the first principles of natural theology, it is only in so far as it is needed for disentangling the mind from the sophistication it has undergone, and for leading it forward to a clear position where that which is open to intuition may freely reach the perceptions. Happy is the mind that, by a genuine simplification of its notions, has come to apprehend the Divine Creative Mind, as expressed in the heavens, and on the earth; and so to commune with the Unseen Intelligence, as it communes with the intelligence of a fellow mind—or as it converses with its own thoughts!

A large portion of what is vaguely termed reasoning, or argumentation, is a laborious process, having really no other object than that of freeing the mind from the misconceptions which prevent its admitting those truths that need no reasoning. To a mind therefore which, by the aid of a genuine system of training, is already in an unsophisticated state, all such logical industry is superfluous, and the powers of reason are

reserved for operations of a more productive kind. Such a system of culture involves, in the first place, as I have already said, a full expansion of the percipient and passive faculties; but it still more urgently demands a just and careful development of the faculty of abstraction: of this faculty especially we may affirm, that the efficient power of the active Reason wholly depends upon its vigour and exactness; and these are in part the gift of nature, and in part they are the fruit of education.

THE END.

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